

STATE of MONTANA



STATE HIGHWAY COMMISSION
HELENA, MONTANA



BIENNIAL REPORT

FISCAL PERIOD

July 1, 1962 to June 30, 1964

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STATE of MONTANA



STATE HIGHWAY COMMISSION

HELENA,

MONTANA



BIENNIAL REPORT

FISCAL PERIOD

July 1, 1962 to June 30, 1964



MONTANA

. . . the BIG SKY country

BIENNIAL REPORT

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July 1, 1962 to June 30, 1964

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HELENA

MONTANA



HIGHWAY COMMISSION

HELENA, MONTANA

STATE
HIGHWAY
ENGINEER
PAUL M. JOHNSON

October 16, 1964

IN REPLY REFER TO

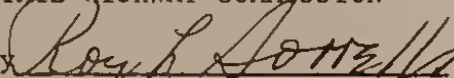
The Honorable Tim Babcock
Governor of Montana, and
The Legislative Assembly
of the State of Montana

Greetings:

Pursuant to the provisions of Section 2,
Chapter 98, Session Laws of Montana, 1959, we have
the honor to submit to you our biennial report
covering the fiscal period beginning July 1, 1962
and ending June 30, 1964.

Respectfully submitted

STATE HIGHWAY COMMISSION

By 
Roy L. Sorrells, Chairman



Completed Interstate Highway through Butte (looking West)

STATE HIGHWAY COMMISSION

HELENA, MONTANA

October 16, 1964

The Honorable Tim Babcock, Governor of Montana
The Legislative Assembly of the State of Montana
The Highway User

Greetings:

The State Highway Commission is the five-member board responsible for the administration of Montana's State Highway System. Highway Commissioners are appointed by the Governor, with the consent of the Senate, to four-year terms of office. The State is divided into five districts with one Commissioner being appointed from each district. The law specifies that no more than three Commissioners may be members of the same political party.

The Commission handles the expenditure of State and Federal funds for improvement and maintenance of eligible highways, conducts affairs of the organization, establishes policy, and interprets and applies the directives established by law.

Meetings are held each month in the Montana Highway Department building at the main office headquarters in Helena for transacting of necessary business and meeting with delegations and individual citizens. The State Highway Engineer presents Departmental business at each session and the action taken by the Commission is recorded and becomes a matter of official public record. Commission meetings are held under the "open door policy" and members of the press and public are invited to attend.

The State Highway Engineer administers the affairs of the Highway Department under the policies established by the Commission. The complex engineering and administrative groups which man the Montana Highway Department all work under the direction of the State Highway Engineer who is responsible for the direction of the work of the employees in accordance with prevailing laws.

The Commission must approve all administrative policies and general engineering standards used by the Department and must regularly review

the construction program and progress, the fiscal position, and all major property acquisitions, transfers and sales. The Commission decides which highways shall be a part of the State Highway System and which projects shall be recommended for construction.

The Federal-Aid Highway System and the State Highway System are closely tied together by the laws of the State. Chapter 32, Revised Codes of Montana, as amended, describes the State Highway System and other roads and streets within the State and prescribes rules and regulations for their administration. The actual mileage of highways, classed according to their type of surface, which existed on the various components of the State Highway System on June 30, 1964, is shown in TABLE "A" on Page 9. TABLE "B" shows mileage by such governmental jurisdictions as city, county, national forest, or Indian Reservation.

Federal-Aid highway funds come from the Federal Highway Trust Fund. Money for this fund is derived from Federal taxes on gasoline, tires, and other products used in the operation and maintenance of motor vehicles. Federal-Aid is administered by the Bureau of Public Roads in accordance with applicable Federal-Aid Highway Acts and administrative policies.

Under no conditions can Federal-Aid funds be used for anything except functions directly concerned with the construction of highways. The maintenance of Federal-Aid highways is excluded from participation in Federal grants in aid, and after construction, the entire cost of maintenance is borne by the State.

One of the responsibilities of the Commission is the preparation of an annual budget which guides the work of the Montana Highway Department through the ensuing fiscal period. The budget is recommended to the State Budget Director by the Commission for his action and he has, under the law, the power to veto any item in the budget for any reason he deems to be appropriate.

Very significant progress has been made in obligating previously

existing balances of Federal-Aid monies. Progress in this area is expected to continue during the coming biennium. This process also requires increased amounts of State matching monies. Diversion of State funds from highway construction could seriously hamper our ability to meet current obligations, and could eventually result in the postponement of planned construction activities or the curtailment of other services.

A modern four-lane Interstate highway with one parallel frontage road has three times as many miles of traffic lanes and four times as much surface area as the road it replaces. In addition, it has many more structures, signs, lighting, guard rail, and other elements. Combined with a steady growth in both size and complexity of Montana's other highway systems, these factors portend a steady growth in the scope and cost of highway maintenance.

A research project covering present Montana highway laws has been completed. Based on this research, the Commission expects to present to the Legislative Assembly a proposal for amendments and revisions which are necessary to put Montana's highway laws in step with an expanded and progressive highway program.

Respectfully submitted,

ROY L. SORRELLS, Chairman

S. N. HALVORSON, Vice-Chairman

GEORGE M. GOSMAN, Member

JOSEPH M. NASS, Member

R. F. KITCHINGMAN, Member



Interstate 94 at Wibaux (looking west)

OBSERVATIONS OF THE STATE HIGHWAY ENGINEER

The biennium covered by this report has been one of hard work and significant accomplishment for the Montana Highway Department. The Department set some records:

1. Largest volume of highway construction work let to contract in any biennium: \$111 million.
2. Largest volume of highway construction work underway at the close of any biennium: \$98 million. (This represents major construction work on 600 miles of roadway and almost 6 miles of structures.)
3. Largest monthly bid letting: June, 1964: \$17.1 million.
4. Largest single highway construction contract: Almost \$6.5 million for construction of 7.1 miles of four-lane Interstate 90 through the rugged mountain area between Butte and Whitehall.
5. Over eighteen hundred separate parcels of right-of-way purchased without resort to court action.
6. Traffic between East Glacier and West Glacier on U. S. 2 which was devastated by the floods of June, 1964, was restored in 32 days.

Less spectacular than the records listed above, but of much greater significance is the fact that the backlog of Interstate projects which had been planned and designed, but which were "bogged down" due to inability to secure right-of-way or required approval, is rapidly being reduced. Although carrying an Interstate project from inception to completion is still a very large and complex task, I feel the Department has passed through a period of learning and growth and now has the capability to meet the schedule projected for completion of the Interstate system. A greatly increased land procurement capability in the Right-of-Way Division, an increase in the size of the Legal Staff, and the establishment of an effective system of project control under a separate Project Control Department are especially important factors in this increased capability.

While working at an accelerated pace on the construction of the Interstate System, the Department has continued its construction work on Montana's 5,933 mile Federal-Aid Primary System (See Map, Page 17) and Montana's 5,578 mile Federal-Aid Secondary System (See Overlay, Page 15). The overlay on Page 13 shows Montana's 1,186 mile Interstate System. In addition, the task of maintaining more and more miles of a wider, more-complex, and more heavily travelled trunk highway system has been carried out.

Tables on Pages 7, 8, and 9 give detailed information on the length, location, and status of various roads and highway systems in Montana. The Local Systems shown are primarily under the jurisdiction of cities and counties.

The National Forest Highway System is under varied jurisdiction. Some of the mileage is on the Federal-Aid Primary System, some is on the Federal-Aid Secondary System, and the greatest share is on Local Systems. A program, financed entirely by Federal funds, has been conducted each year for improvement of the Forest Highway System. There is serious need for improving or upgrading much of this mileage. The level of the current Forest Highway Program falls far short of meeting these needs.

The construction and maintenance of the Interstate System is the responsibility of the State Highway Commission. Present Federal-Aid Highway Acts limit the system to the present 1,186 miles. Construction is financed with 91% Federal and 9% State funds. Completion of the presently designated Interstate System, both nationally and in Montana, is scheduled for 1972.

The construction and maintenance of the Primary System is the responsibility of the State Highway Commission. Present Federal-Aid Highway Acts, together with the fact that less than 75% of the system is improved to present-day standards, prevent the addition of more mileage to Montana's Primary System. Construction is financed with 57% Federal and 43% State funds.

The construction of the Secondary System is the responsibility of the State Highway Commission. The State Highway Commission has followed the general practice of allowing the Board of County Commissioners in each county to establish priorities for improvement of Secondary Roads. Construction is financed with 57% Federal and 43% State funds. The maintenance of completed Secondary projects is the responsibility of the county. However, the State Highway Commission has assumed the obligation of maintenance of a few Secondary Roads where study has determined they are, by virtue of type, origin and volume of traffic, actually trunk routes which would properly be on the Primary System if more mileage could be added to that system.

State highway construction funds are allocated to the highway systems, the Financial Districts, and the counties in accordance with Montana Statutes. Applicable percentages for the Fiscal Years 1964 and 1965 are shown on Page 10.

The map on Page 11 shows current traffic in average vehicles per day on a selected group of important highway routes. The growth in traffic which will occur over the next twenty years is greater than is generally realized. Twenty years from now traffic on an Interstate Route will be about 2.9 times today's traffic; traffic on a Primary Route will be about 2.0 times today's traffic; and traffic on a Secondary Route will be about 1.6 times today's traffic. These statistics should give the reader a

clear picture of why we cannot wait twenty years to replace roads which are inadequate today.

On Page 18 is shown the current organization chart. Aside from changes in personnel and adjustment, both upward and downward, in the level of a few jobs, some of the major organizational changes made during the biennium were: (1) Elimination of the positions of Technical Engineer and Administrative Engineer, and (2) in keeping with the recommendations of the Jorgenson Report, creation of the positions of Deputy State Highway Engineer and Assistant to the State Highway Engineer.

The Personnel Report is on Pages 19 and 20. Although the maintenance workload is steadily increasing, a significant reduction in total personnel was achieved during the biennium. The net increase in personnel is proportionately much less than the increase in the Department's workload. Of the net increase of 322, 225 are directly engaged in the field on surveys, inspection, and testing of highway construction work. Of this 225 increase in field construction forces, approximately 140 are temporary summer personnel needed for testing and inspection during the peak of construction season.

The HIGHWAY CONSTRUCTION REPORT on Pages 21 to 31 gives detailed information regarding construction activities of the Department. Most of the total increase in Department personnel during the biennium is attributable to the growth of our highway construction program. While the sheer increase in the size of the program is the major factor, the increased complexity of certain items of work, increased speed and scope of contractor operations brought about by newer and larger equipment, and an increase in the amount of inspection, sampling, and record-keeping necessary to meet new Federal-Aid requirements are also factors in this growth.

THE RIGHT-OF-WAY REPORT is on Page 32. In spite of a considerable increase of both the size and the level of technical training of our staff, the task of acquiring the right-of-way necessary for construction of modern highways remains one of our most serious problems. Although we make every effort to reach a settlement which is fair to both the landowner and the taxpayer, it was necessary to institute condemnation proceedings in over 350 cases during the biennium.

Pages 33, 34, and 35 contain the FINANCIAL REPORT including a statement of receipts and expenditures for the biennium. Page 36 shows a graphic illustration of where the 1963-1961 highway dollar came from and the purpose for which it was spent. Montana was the second state to enter into an agreement allowing concurrent audit and billings, which greatly expedites payment of the Federal-Aid share of the cost of a highway project. The State Highway Commission's letter on Page 4 of this report contains a very significant statement regarding our future fiscal position.

The MAINTENANCE REPORT, on Pages 37 through 45, contains a

large volume of detailed information. In view of Montana's severe climate, vast distances, and the fact that many miles of 1930-era highway are still being kept in service, I feel very proud of the high standard of maintenance being provided the Montana motorist.

The Highway Department has attempted to utilize modern methods and equipment wherever feasible. More electronic data processing equipment has been added. The Department has utilized electronic data processing to provide fast economical computations of engineering problems and rapid processing of accounting and statistical reports since 1959. Modern data processing methods have greatly reduced the amount of routine hand computation which in turn has held total personnel requirements down. Use of aerial photography has expanded to cover such diverse areas as public relations and court room presentations. A portable refraction seismograph is now being used for subsurface exploration. Radiographs are used to check the quality of welds in welded steel bridge girders.

Federal regulations governing the design year for Interstate projects were recently changed. As a result, Montana's Interstate will have roughly 600 miles of four-lane rather than the 400 miles which previous rules would have allowed. This change coincides with our position that the Interstate must be built to a standard of unquestioned adequacy. Our Miles City West Interstate project was a finalist in Parade Magazine's 1962 contest for the highway which best embodies the principles of land use, planning, construction, and design.

In addition to the regular public hearings which are held for each proposed project, general public meetings were held in many of the larger cities to explain and answer questions relative to Montana's overall highway program. Urban Transportation Studies for the cities of Billings and Great Falls were conducted. Contracts for the first Roadside Rest Areas to be built as part of the Interstate System were let. Contracts for five Roadside Rest Areas to be built on the Primary System were let. More Roadside Rest Areas are planned for both of these systems.

I could continue at length reciting the accomplishments of our various departments and divisions. Suffice to say that our accomplishments would not have been possible without the cooperation and loyalty of our personnel. The accomplishments were not achieved without sacrifice. In spite of an expanded safety program, four Department employees lost their lives while acting in the line of duty during the biennium.

Looking into the future, we expect the coming biennium to see more tasks accomplished and more records broken. Further, we expect the coming biennium to be a period of still greater service to our clients and customers—the road users and taxpayers.

PAUL M. JOHNSON
State Highway Engineer

NET LENGTH PRIMARY SYSTEM

(By Surface Type and County)

COUNTY	PRIMITIVE		UNIMPH.		GRADED & DRAINED		GRAVEL		BIT. SURF. TR.		ROAD		MIX		PLANT		MIX		BIT. CONCRETE		P.C. CONCRETE		BRICK		CIVIL		TOTAL RURAL	TOTAL MUNIC.	GRAND TOTAL	
	A		B		C		E		F		1-1 UNDER 7"		2-2 7" & OVER		3-3 UNDER 7"		4-4 7" & OVER		I		J		K		L					
	RURAL	MUNIC.	RURAL	MUNIC.	RURAL	MUNIC.	RURAL	MUNIC.	RURAL	MUNIC.	RURAL	MUNIC.	RURAL	MUNIC.	RURAL	MUNIC.	RURAL	MUNIC.	RURAL	MUNIC.	RURAL	MUNIC.	RURAL	MUNIC.	RURAL	MUNIC.				
Beaverhead									14.765		2.306		62.398	0.033			76.638	1.671									156.107	1.704	157.811	
Big Horn									3.067		7.890		60.103	1.477			68.691		0.054								139.751	1.511	141.262	
Blaine									13.571		4.686		22.590	1.293			12.776										34.024	1.293	35.322	
Broadwater									18.972	0.878	7.586		43.767	1.107			7.294										79.617	1.955	81.604	
Carbon											60.604		3.134				18.697				0.432						89.017	3.566	92.583	
Carter									10.845				16.441				22.719	1.049									50.005	2.049	51.054	
Cascade*									27.029	0.641	0.681		87.332	1.572	23.114	3.224	54.602	7.529	1.400	6.630	0.760	0.749					194.918	20.745	215.663	
Chouteau*									19.172	0.220	13.093		26.747	0.422			13.558										72.570	0.642	73.212	
Custer*									41.308	0.370	18.062	0.467	49.898	0.869			40.540		0.400	6.774	1.169						156.582	3.275	159.857	
Daniels						4.885			42.270	0.278				1.182														47.155	1.459	48.614
Dawson									5.238		16.699		35.482	1.417			64.186	0.538									121.605	2.187	123.792	
Deer Lodge									0.402	0.279				0.949			33.638	1.875			2.642	0.232					62.493	2.624	65.117	
Fallon						0.144			49.328	1.237			22.576	0.832			11.275	1.148									83.179	3.361	86.540	
Fergus									8.933		1.986		83.399	0.497			21.497	2.301			0.836	1.247	0.189				177.062	3.275	180.337	
Flathead									6.422		17.480		127.710	1.069			59.602	2.611			0.292		0.005				211.214	3.977	215.191	
Gallatin		1.250				0.568			10.124		20.953	0.207	23.971	1.143	8.049	0.791	79.489	0.372			2.184	0.342					142.586	7.357	149.943	
Garfield	1.287						2.289		35.785		23.762		66.400	0.602			8.103										136.339	0.602	136.941	
Glacier									27.571		16.859		87.321	0.719			15.994	1.039									149.032	1.756	150.790	
Golden Valley									12.514	1.876	2.083		25.070														39.667	1.876	41.543	
Granite				20.931		7.064			13.735		6.566	0.370	32.407	1.177			15.762										96.165	1.547	97.712	
Hill									5.093		11.610		34.446	0.476			27.287	1.094									78.435	1.922	80.357	
Jefferson									6.424		15.977		49.837	0.641			13.481	1.511									105.729	2.152	107.881	
Judith Basin									3.967		5.818		48.052	0.222			3.343										51.190	0.222	51.412	
Lake									11.662		12.476		49.113	0.931			40.109	0.776									113.160	1.707	114.867	
Lewis & Clark*									35.574	0.129	18.155	2.573	47.667	0.312	15.037		68.467	3.389			1.220	1.296	0.035				184.900	8.954	193.854	
Liberty									0.253		4.017		19.728	0.899			0.983										24.981	0.899	25.840	
Lincoln						0.033			54.397	0.073	11.454	0.424	89.369	2.536	11.310		5.320										171.683	3.219	175.102	
Madison						11.420			10.064		60.843	0.662	72.210	3.081			5.167	1.576									159.704	5.319	165.023	
McCona						38.783			5.194		33.108	0.404	58.204	1.173			8.325										144.214	1.577	145.791	
Meagher									50.090		5.051	0.976	28.290				17.377										100.808	1.221	102.029	
Mineral									3.670		4.250		23.856				43.116	3.351									74.892	3.351	78.243	
Missoula					0.208				17.845	0.658	17.914	1.385	60.384	1.646			24.341	1.519			0.791						120.692	6.654	127.346	
Musselshell									18.253	1.054	25.043		49.291	1.616			5.953	0.151			0.559						98.340	3.775	102.115	
Park*									17.446		13.853		43.396	2.499	1.523		45.249	0.392									121.477	2.891	124.368	
Petroleum									7.983		11.215	0.715	16.037	0.182			5.833										41.068	0.897	41.965	
Phillips									10.176	0.162			72.406	3.081			39.260										121.842	3.312	125.154	
Pondera									12.062		17.581		17.581				0.660										52.085	0.955	53.040	
Powder River									12.888	0.229	21.782		35.845	0.339			40.834	0.955									89.567	0.568	90.135	
Powell*				1.235					6.126		6.036		19.326	0.071			58.011	0.250			0.743						90.734	1.064	91.798	
Prairie											5.525		18.075	1.002			4.137										47.737	1.002	48.739	
Ravalli					16.294				29.553		3.207	0.320	37.432	1.769			14.584										101.070	2.098	103.168	
Richland									57.603		19.984		41.072	2.740													118.659	2.740	121.399	
Roosevelt									45.987	0.643	19.572	0.819	16.358	0.421			51.406	2.428			0.139						143.323	4.450	147.773	
Rosebud*									23.683	0.323	6.951		86.340				30.842	1.785									147.816	2.108	149.924	
Sandwich									11.796	0.247	14.756	0.103	61.596	0.649			27.497	0.403					0.454				145.645	1.856	147.501	
Sheridan									16.031	0.143	6.378		42.054	2.010			11.411	0.181									75.874	2.334	78.208	
Silver Bow									11.041	2.205	6.931		32.539	2.069			12.332	0.294	0.008	2.557	2.007	0.669	0.560				64.858	8.354	73.212	
Stillwater									1.376				36.613	0.588													37.989	0.588	38.577	
Sweet Grass									12.103		7.225	0.516	30.359				14.434	0.887									64.121	1.403	65.524	
Teton									20.051	0.866	21.194	1.175	36.280	1.032			20.773										88.258	3.073	91.331	
Toole*									5.006		18.922	0.291	25.295				35.934	1.833									85.157	2.234	87.391	
Treasure											28.805																28.805		28.805	
Valley><																														

By Surface Type and County

SUMMARY OF SURFACE TYPES AND MILEAGE

**TABLE "A"—SUMMARY OF SURFACE TYPES—
ALL SYSTEMS—MILES**

	Unimproved	Gr. & Dr.	Gravel	Light Oil Mix	Bituminous Road Mix	Bituminous Plant Mix	P. C. Concrete	Other	Total
State Highway System									
Primary (1)	3	39	65	971	3,163	1,654	34	4	5,933
Secondary	258	505	2,582	503	851	874	1	1	5,578
Other			14		6	3	1		24
Local Systems									
Rural	29,969	11,301	19,413	165	759		6		61,646
Municipal		184	471	305	546	81	21	2	1,610
TOTALS	30,230	12,032	22,575	1,944	5,328	2,612	63	7	74,791

**TABLE "B"—SUMMARY OF ROUTES BY LOCATION—MILES
STATE HIGHWAY SYSTEM**

	Municipal	County	National Forest	Indian Reservation	Military Reservation	State Forest	National Park	Game Refuge	Total
Primary (1)	168 (2)	4,624	546	588	2	42 (3)	24	36	5,940
Secondary	63 (4)	4,611	345 (1)	549	1	23		30	5,592
Other	4	16	3						23
Grand Total									11,555
Less Coincident Mileage									22
Net Total									11,533

TABLE "C"—INTERSTATE HIGHWAY

Location—U. S. 10 from Lookout Pass on Idaho State Line via Missoula, Butte, Billings, Glendive to North Dakota State Line near Wibaux

U. S. 87 from Billings via Hardin to Wyoming State Line south of Wyola

U. S. 91 from Monida Pass on Idaho State Line via Dillon, Butte, Helena, Great Falls, Shelby to Canadian Border at Sweet Grass

Length	
Present traveled way	1232 miles
Estimated final length	1180 miles
Present Surface Types (6)	
Bituminous Surface Treatment	6 miles
Bituminous Road Mix	1 mile
Bituminous Plant Mix	258 miles
Portland Cement Concrete	20 miles
Lanes (6)	
Four Lane Highway	84 miles
Two Lane Highway	201 miles

TABLE "D"—NATIONAL FOREST HIGHWAY SYSTEM

Class 1	677 miles	Unimproved	26 miles
Class 2	323 miles	Graveled	46 miles
Class 3	258 miles	Graveled	112 miles
Total	1258 miles	Oiled	205 miles
		Bitum, Road Mix	265 miles
		Bitum, Plant Mix	346 miles
		Other Systems	258 miles
		Total	1258 miles
Constructed by State	239 miles		
Constructed by B.P.R. (5)	638 miles		
Constructed by Others	6 miles		
Unconstructed	375 miles		
Total	1258 miles		

Notes:

- (1) Includes Interstate
- (2) 5 miles municipal also in Indian Reservation
3 miles municipal also in National Forest
- (3) 0.2 miles in National Monument
- (4) 14 miles coincident mileage as in (2)
- (5) B.P.R.—Bureau of Public Roads
- (6) Completed to Interstate Standards

APPORTIONMENT OF STATE CONSTRUCTION FUNDS

Montana law requires that State highway construction funds be divided among the different systems and among the financial districts, counties and urban cities on the basis of prescribed formulas. The tables on this page show the distribution percentages for the fiscal years ending June 30, 1964 and June 30, 1965.

INTERSTATE SYSTEM

Financial District	Counties	Percentages for	
		FY 1964	FY 1965
2	Toole	2.9878	2.9878
4	Dawson, Prairie, Wilhans	3.5728	3.5728
6	Cascade, Poppleton, Teton	8.4550	8.4550
7	Broadwater, Jefferson, Lewis & Clark	17.3726	17.3726
8	Granite, Mineral, Missoula, Powell	20.4819	20.4819
9	Beaverhead, Deer Lodge, Madison, Silver Bow	11.9026	11.9026
10	Gallatin, Park, Sweet Grass	11.7633	11.7633
11	Big Horn, Stillwater, Treasure, Yellowstone	16.9900	16.9900
12	Custer, Rosebud	4.4734	4.4734
TOTAL		100.0000	100.0000

Apportion percentages have been adjusted in accordance with latest needs estimate as furnished in Congress under Section 301(b) of Title 23, U. S. Code—Highways. The Interstate System does not enter Financial Districts 1, 3 and 5 and some counties in other Districts. Percentages will remain the same until the next "needs" estimate.

PRIMARY SYSTEM

(Based on defined highway mileage)

Financial District	Counties	Percentages for	
		FY 1964	FY 1965
1	Flathead, Lincoln, Lake	10.7247	11.1242
2	Blaine, Glacier, Hill, Liberty, Teton	7.0319	7.2030
3	Daniel, Phillips, Ronneville, Sheridan, Valley	10.3130	10.2312
4	Dawson, McCone, Prairie, Richland, Wilhans	9.4912	9.7852
5	Logan, Garfield, Petroleum	6.6670	5.9542
6	Cascade, Judith Basin, Pondera, Teton	9.1237	8.2673
7	Broadwater, Jefferson, Lewis & Clark	4.7074	4.7379
8	Granite, Mineral, Missoula, Powell, Ravalli, Sanders	11.9404	12.0973
9	Beaverhead, Deer Lodge, Madison, Silver Bow	4.6723	4.9754
10	Gallatin, Meagher, Park, Sweet Grass, Wheatland	6.8546	6.8993
11	Big Horn, Carbon, Golden Valley, Musselshell, Stillwater, Treasure, Yellowstone	8.3512	8.5118
12	Carter, Custer, Fallon, Powder River, Rosebud	6.7326	6.2692
TOTAL		100.0000	100.0000

Deficient mileage figures shown exclude Primary System mileage located on Interstate System.

URBAN SYSTEM

(Based on Urban population of 5,000 or more)

Urban City	Percentages for		Urban City	Percentages for	
	FY 1964	FY 1965		FY 1964	FY 1965
Anaconda	4.1696	4.1696	Hayre and environs	4.1191	4.1191
Billings	18.2219	18.2219	Helena	6.9968	6.9968
Bozeman	4.6217	4.6217	Kalispell	3.5114	3.5114
Butte and environs	14.3544	14.3544	Lewistown	2.5625	2.5625
Glasgow	2.2132	2.2132	Livingston	2.8465	2.8465
Glendive	2.4415	2.4415	Miles City	3.3432	3.3432
Great Falls	19.1487	19.1487	Missoula and environs	11.3895	11.3895
TOTAL		100.0000	TOTAL		100.0000

Population reported in Census for fringe areas of Butte, Havre and Missoula has also been included as urban population in accordance with requirements of State law. The percentages will remain as in 62-63 until 1970.

SECONDARY SYSTEM

(Based on land area, rural road mileage, rural population, and rural land value)

County and Financial District	Percentages for	
	FY 1964	FY 1965
Flathead	3.5364	3.5364
Lake	1.9939	2.0071
Lincoln	2.2846	2.2088
Financial District No. 1	7.8151	7.8743
Blaine	2.6244	2.6361
Glacier	1.9760	1.9589
Hill	2.7879	2.7699
Liberty	1.3369	1.3328
Toole	1.9987	1.9811
Financial District No. 2	10.9039	10.8768
Daniels	1.3972	1.4102
Phillips	2.6331	2.6288
Ronneville	2.1482	2.1579
Sheridan	1.8084	1.8359
Valley	3.6292	3.6294
Financial District No. 3	10.9962	11.0022
Dawson	1.6232	1.6301
McCone	1.7436	1.7581
Prairie	0.9359	0.9090
Richland	1.8922	1.9106
Wilhans	0.7506	0.7481
Financial District No. 4	6.9455	6.9559
Fergus	2.5812	2.5811
Garfield	1.7489	1.7639
Petroleum	0.7457	0.7433
Financial District No. 5	5.4758	5.4743
Cascade	3.2072	3.2118
Charlton	3.6755	3.5708
Judith Basin	1.5900	1.5330
Pondera	2.2130	2.1995
Teton	2.2545	2.2375
Financial District No. 6	12.9372	12.7526
Broadwater	0.8586	0.8904
Jefferson	0.9279	0.9346
Lewis & Clark	1.6618	1.6748
Financial District No. 7	3.6883	3.6998
Granite	0.8415	0.8428
Mineral	0.6607	0.6601
Missoula	1.5339	1.9569
Powell	1.4454	1.4489
Ravalli	1.9249	1.9316
Sanders	1.6339	1.6531
Financial District No. 8	8.4403	8.4934
Beaverhead	2.4979	2.5035
Deer Lodge	0.8035	0.8115
Madison	1.7008	1.7069
Silver Bow	0.6688	0.6789
Financial District No. 9	5.6710	5.7008
Gallatin	2.4399	2.4625
Meagher	1.1298	1.1381
Park	1.4933	1.4920
Sweet Grass	1.0790	1.0938
Wheatland	0.9208	0.9170
Financial District No. 10	7.0828	7.1034
Big Horn	2.6197	2.6557
Carbon	1.7466	1.7580
Golden Valley	0.7002	0.6968
Musselshell	1.2159	1.2084
Stillwater	1.4435	1.4246
Treasure	0.5552	0.5584
Yellowstone	3.5953	3.5943
Financial District No. 11	11.8764	11.8962
Carter	1.4233	1.4285
Custer	1.6686	1.6357
Fallon	1.2075	1.1583
Powder River	1.5063	1.5248
Rosebud	2.3618	2.3640
Financial District No. 12	8.1675	8.0913
State Total	100.0000	100.0000

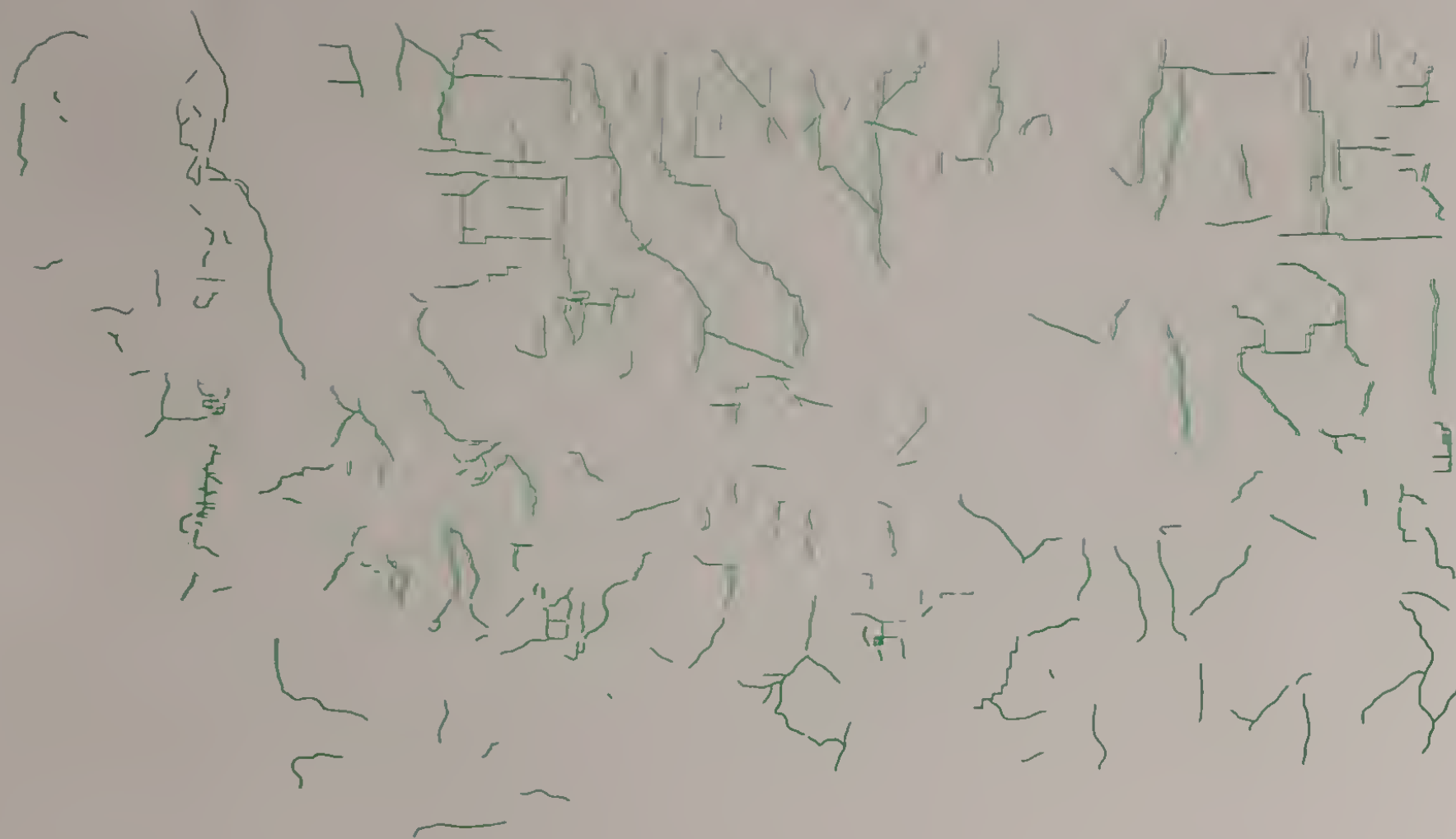
TRAFFIC DATA 1963



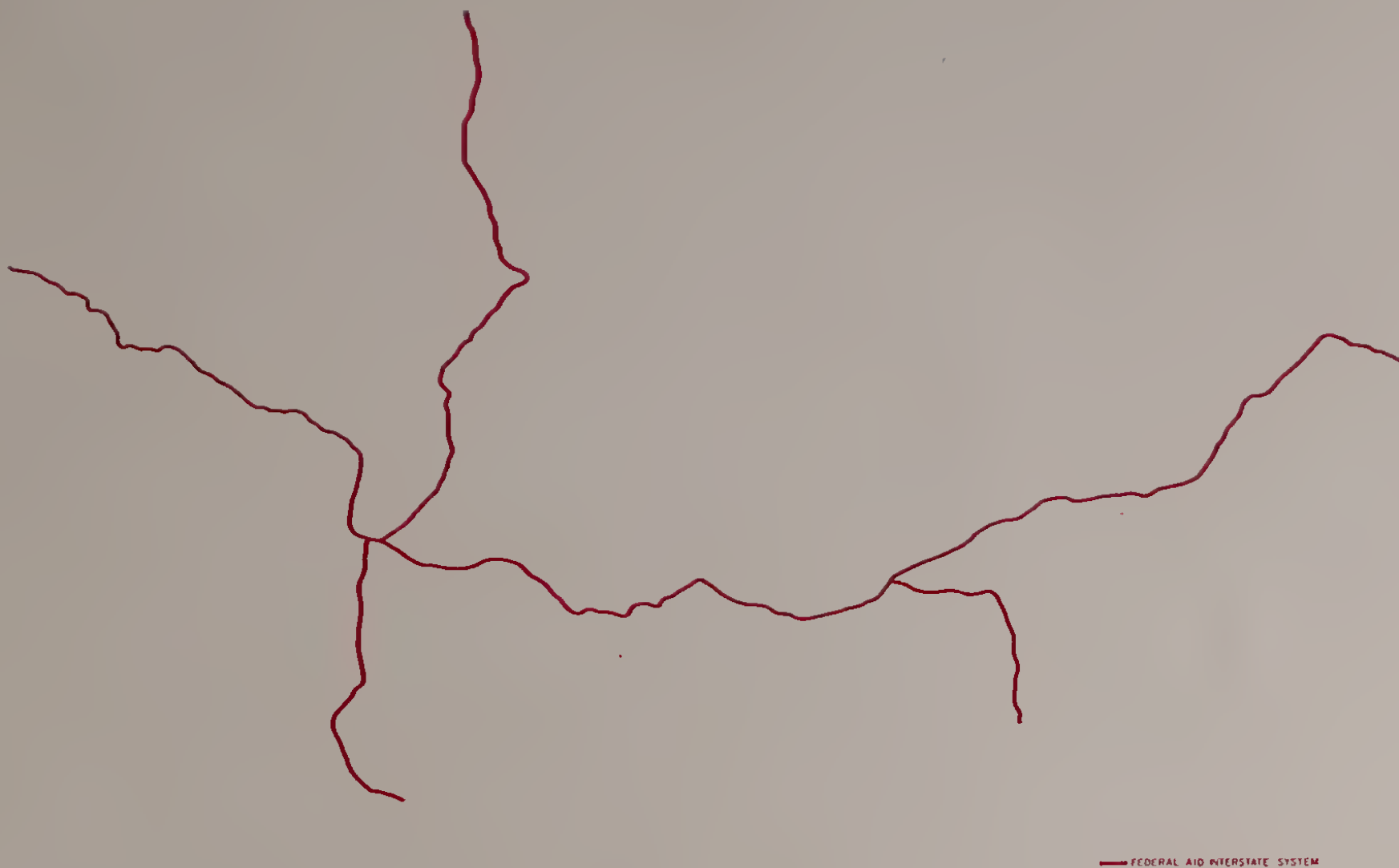
Construction
on new
Airport
Road
overlooking
Billings



New Higgins
Avenue Bridge
in Missoula

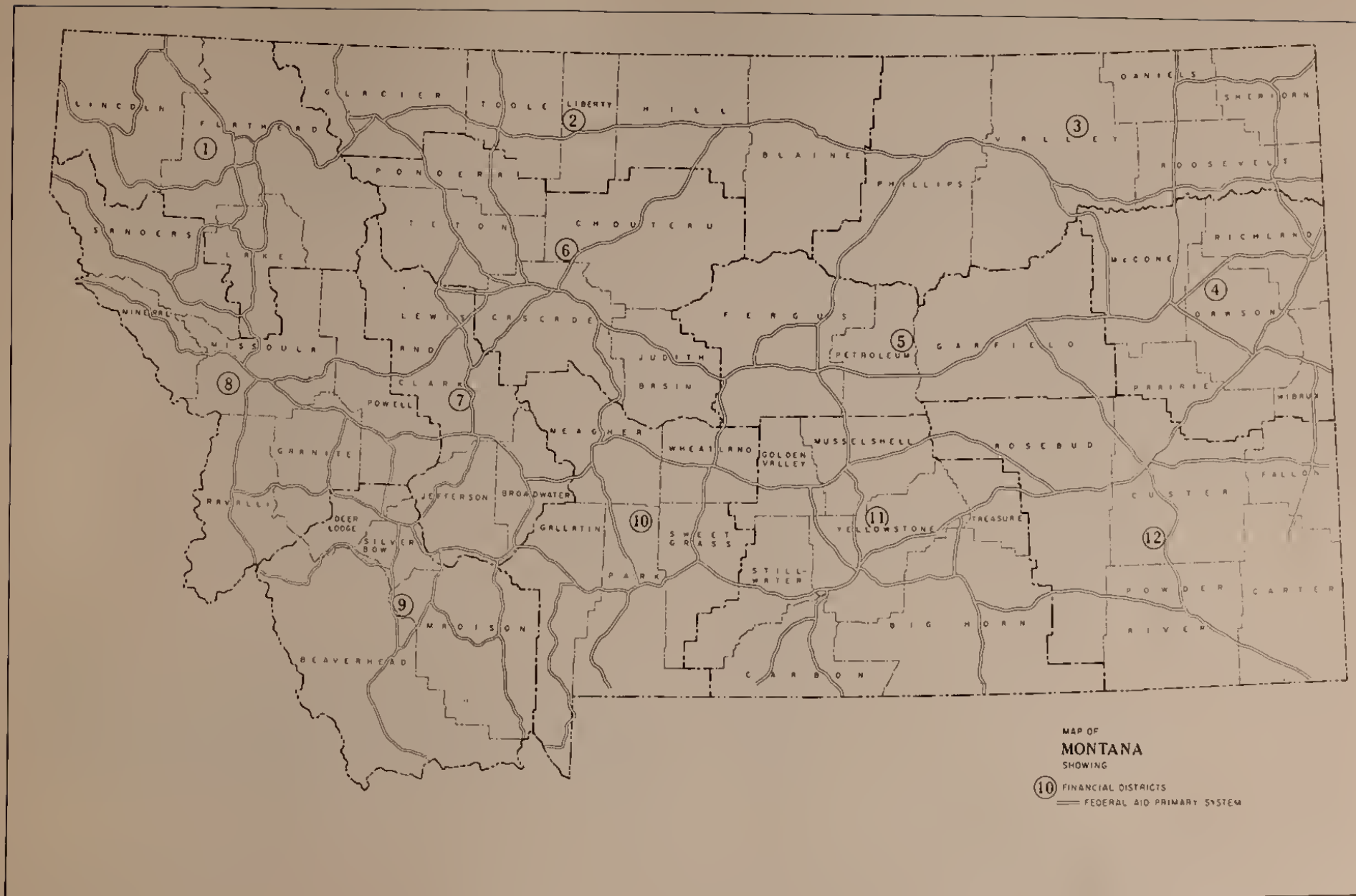


— FEDERAL AID SECONDARY SYSTEM

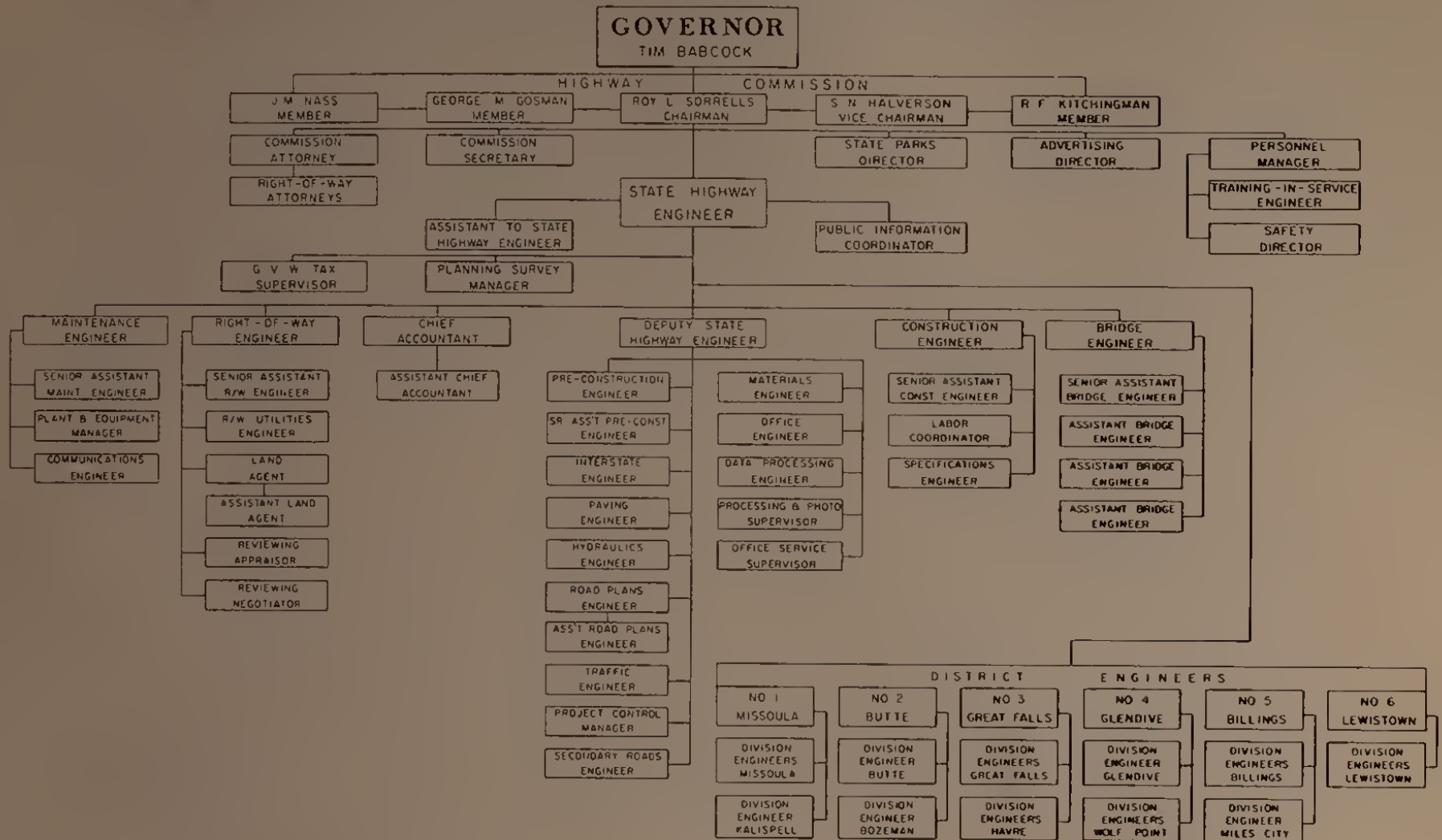


— FEDERAL AND INTERSTATE SYSTEM





ORGANIZATION CHART STATE HIGHWAY COMMISSION OF MONTANA



PERSONNEL REPORT

The Personnel Manager is responsible for the basic personnel functions and records, plus the recruiting, training, and safety activities of the Department.

As a part of performing its basic personnel function, the Personnel Department is responsible:

- (A) To screen applicants as to their basic qualifications and their application to such vocations as engineering and technical and skilled trades.

The information is subsequently filed, categorically, for the future reference of divisions and section supervisors who are responsible for the final selection and placement. This procedure is calculated to save the supervisor valuable time in investigation and considerable unnecessary interviewing.

- (B) To maintain complete personal histories of all employees. To maintain time and attendance records and performance records.

This encompasses such matters as veteran's preference, residence requirements, proper age limits, employee conduct, and other prescribed criteria.

- (C) To insure that all prescribed regulations, statutory laws and Commission policies are strictly complied with where they concern personnel procedures.

- (D) To compile statistical reports with subsequent analyses of wage structures, retention factors, cost-of-living index, organizational changes, advancements, and turnover.

These analyses are based on comparative studies conducted in other states, supply and demand, and factors of money, manpower, and management.

The Personnel and Salary Summary shown on the following page gives details on numbers of personnel, classification and wage rates. The old P (Professional), SP (Sub-Professional), and NE (Non-Engineering) classification prefixes were replaced with a new system of "G" grades. A Personnel Manual, setting forth personnel regulations and procedures, was prepared and distributed.

The program, which was established a few years ago, granting service pins and certificates for terms of employment of five years and multiples thereof has been continued as it has proved to be very successful.

Intensified effort in the area of recruitment of college graduates has been fruitful. Despite severe competition, twenty-two graduate Civil Engineers were recruited during the biennium. Increasing numbers of college graduates in other fields are also being hired and utilized.

The Training-in-Service program, designed to upgrade personnel through schools and special seminars, was continued. Summary of off-duty schools conducted:

Basic Mathematics	9 Schools Conducted
Basic Engineering	5 Schools Conducted
Advanced Engineering	6 Schools Conducted
Mechanics of Materials	2 Schools Conducted

Summary of Special Seminars conducted:

Field Construction Seminar.....	1 Day (Held in all 11 Divisions)
Headquarters Construction Seminar ..	2½ Days (2 Sessions held)
Accounting Seminar.....	1½ Days
Radiological Monitoring Course	3½ Hours (Held in all 11 Divisions and Helena Headquarters)

The program of tests for advancement of technical personnel was continued. One hundred ninety-six tests for advancement were prepared and administered.

Activities of the Safety Department during the biennium were as follows:

- (A) Reduction of Industrial Accident costs by reducing our accident frequency rate. This was done through our efforts to hold safety meetings throughout each division.
- (B) Reduction in equipment costs from accidents throughout the State.
- (C) Increased safety through inspection of all construction projects.
- (D) Inspection of all maintenance projects.
- (E) Inspection of all maintenance facilities (garages and shops).

First aid schools were held for all employees. Since our personnel are often the first ones at the scene of an accident, the benefit of this training should enure to the general public as well as the Department. A system for review of accidents was set up. Disciplinary action is taken when an accident is determined to be the fault of an employee.

A representative of the Safety Department attends all preconstruction conferences. The objective is to acquaint highway contractors with safety requirements and to focus attention on the necessity for conducting all operations safely.

PERSONNEL AND SALARY SUMMARY

ENGINEERING & ADMINISTRATIVE PERSONNEL

MAINTENANCE PERSONNEL

Pay- roll Grade	Salary Range 1962		No. in Grade 1962	Pay- roll Grade	Salary Range 1964		No. in Grade 1964			
	Min.	Max.			Min.	Max.				
P-9	\$1100	\$1320	1	G-35	\$1100	\$1320	1	Missoula Division	107	87
P-8	910	1100	4	G-34	1050	1260	1	Kalispell Division	73	80
P-7	830	1000	8	G-32	955	1150	7	Butte Division	79	93
P-6	720	870	12	G-30	870	1050	5	Bozeman Division	65	53
P-5	690	830	17	G-28	790	955	25	Great Falls Division	96	82
P-4	630	755	13	G-26	720	870	28	Havre Division	54	51
P-3	600	720	19	G-24	660	790	11	Glendive Division	39	52
P-2	550	660	115	G-23	630	755	34	Wolf Point Division	45	44
P-1	500	600	121	G-21	575	690	139	Billings Division	77	56
SP-6	550	660	6	G-20	550	660	5	Miles City Division	52	45
SP-5	525	630	3	G-19	525	630	212	Lewistown Division	35	57
SP-4	455	550	36	G-17	475	575	84	Helena Shop & Core Drill	36	34
SP-3	415	500	238	G-15	435	525	269			
SP-2	360	435	161	G-13	395	475	79			
SP-1	345	Temp.	247	G-12	375	455	157			
NE-11	690	830	13	G-11	360	435	47			
NE-10	600	720	11	G-10	345	415	388			
NE-9	550	660	11	G-9	330	395	41			
NE-8	500	600	40	G-7	300	360	25			
NE-7	455	550	29	G-5	270	330	35			
NE-6	415	500	24							
NE-5	375	455	31							
NE-4	345	415	24							
NE-3	315	375	33							
NE-2	285	345	15							
NE-1	255	315	12							
SUBTOTAL			1247				1593		758	734

GRAND TOTAL

1962	1964
2,005	2,327

HIGHWAY CONSTRUCTION REPORT

The Construction Engineer and the Bridge Engineer are charged with the general overall responsibility for the construction of roadway and bridge projects. Their contact with construction engineering forces is through the District Engineers.

The Construction Engineer is called upon for advice during various phases of project planning prior to construction. He and his staff review the proposed work for each proposed contract prior to bid opening date. The Bridge Engineer and his staff prepare and check all plans and specifications for bridge and structure projects and are called upon for advice during the various phases of planning.

The progress estimates for payment of contract work are processed and reviewed by these offices. They also review all sub-contracts and modifications of contracts after execution. They must review and weigh all circumstances and conditions concerned with overruns of contract time and submit their recommendations to the State Highway Commission as pertains to possible liquidated damages due to delay in completion time. They make frequent field inspection trips to obtain assurance that projects are being built in accordance with plans and specifications and to advise District Engineers and field assistants relative to their problems. They and their staffs evaluate and recommend new materials, equipment and procedures.

Changes in design, materials and construction methods make review and updating of the Standard Specifications a continuing task. A new edition of the Standard Specifications will be issued in 1965. The Construction Engineer and Bridge Engineer must also prepare Special Provisions, which cover special situations unique to individual projects.

The Construction Engineer and Bridge Engineer are members of a Prequalification Board, established many years ago, to review, consider and rate all prospective bidders as to their ability to bid upon, accept project awards and construct contemplated projects. The State Highway Engineer, the Office Engineer, the Specifications Engineer and the Chief Accountant are the other members. The prequalification procedure is actually for the protection of the public in that it tends to assure that contractors who bid on highway contracts have the qualifications and equipment necessary to do the work.

Two Engineering Coordinators were added to the staff of the Construction Engineer. These men visit construction projects periodically to give guidance and advice on special problems and to insure uniform interpretation of specifications. The first section of a Construction Manual was prepared and distributed. Training of construction inspection personnel was accentuated through seminars and other training activities.

All contracts let in recent years, wherein Federal-Aid is involved, include a provision stipulating job classification and minimum wages for all of a contractor's employees. The Construction Engineer is charged with the enforcement of this provision.

Bridge Department Standards were revised to take advantage of new materials and developments. Standards for bridge widths were recently revised to provide wider, safer bridges. New bridge railings which will enhance both the safety and appearance of bridges have been developed. Standards for prestressed beams were revised to allow use of the new 270 K steel. One 7/16 inch strand of this steel will safely sustain a load of over ten tons.

Much greater use has been made of welded steel girders in the construction of longer span bridges. To insure satisfactory standards of welding, the Bridge Department reviews all weld radiographs and conducts extensive field reviews of the completed girders.

The following tabulation shows the length and cost of the various types of bridges awarded to contract during the biennium. Steel and concrete are the predominant materials:

Type of Bridge	Length in Feet	Cost
Steel Girder	13,712	\$7,576,495
Precast Prestressed Concrete Beams	21,333	7,485,587
Treated Timber Stringer	427	44,749

Minor concrete and steel structures, less than 20 feet in roadway length, were awarded to contract for machinery and vehicle underpasses for a cost of \$104,484.

Automatic flashing light signals were installed to protect the Railway-Highway grade crossings at the following locations:

Anaconda—4 locations
 Avon
 Cartersville
 Cut Bank
 Galen
 Great Falls—2 locations
 Harlem
 Lewistown
 Lodge Grass
 Monida

The major costs of these signals were from Federal-Aid funds.

Bids were opened and awards subsequently made on projects totaling a value of \$110,860,677 during the biennium. The type of work involved in these projects is reflected in the following tabulation:

Highway and Bridge Construction	\$108,756,589
Maintenance gravel stockpiles	2,002,968
Maintenance buildings	19,788
Maintenance painting	47,901
Right-of-way fences (Miscellaneous)	33,431
	\$110,860,677

All contracts awarded were not completed during the biennium. There were 168 projects which had been let to contract during the biennium which were not complete on June 30, 1964. Contract awards for this work totaled \$97,934,368. The award value is divided as follows: Interstate, \$67,832,201; Primary, \$15,451,434; Secondary, \$13,697,531; State Maintenance Projects, \$953,202.

Highway and bridge construction projects completed during the biennium totaled a value of \$69,408,305. This figure does not include cost of right-of-way or engineering. Tabular summaries of these contracts in order of date of completion are given on the following four pages. Some of these contracts were let prior to this biennium and some were let and completed during the biennium.

The summaries showing projects completed during the biennium show some projects wherein length is a minor consideration. The length shown for fencing, seeding, signing and similar projects is the total length of the project. The actual length of fence would normally be about twice the length of the project. The lengths shown for structures includes bridges, overpasses and underpasses. Where dual structures are built, the length shown is an average length measured along the roadway center line.

The length and construction of various types of work is shown below for each of the three major highway systems:

INTERSTATE SYSTEM

Grade, Pavement and Major Bridges	128.579 miles	\$32,071,115
Minor grading and bank protection (Riprap)	0.565 miles	183,241
Major Bridges (A)	7,582.1 feet	2,638,311
Right-of-Way Fencing (A)		661,628
Signs (A)		363,970
Seeding (A)		75,182
Seeding and Fertilizing (A)		123,568
Bituminous Seal Coating (A)	73.713 miles	212,162
		\$36,329,510

PRIMARY SYSTEM

Grade, Pavement and Major Bridges	(B)	148,885 miles	\$16,011,052
Major Bridges (A)		1,420.5 feet	596,751
Grade and Gravel (A)		23.472 miles	1,299,106
Grade and Slide Removal (A)		0.552 miles	47,478
Base and Pavement (A)		10.851 miles	242,966
Bituminous Plant Mix (A)		83.341 miles	1,391,646
Bituminous Seal Coat (A)		172.396 miles	314,058
Fence (A)			15,089
Signs, Signals and Lights (A)		1.668 miles	96,729
Seeding (A)		112.791 miles	41,257
Seeding and Fertilizing (A)		39.373 miles	12,521
Bridge Repair (A)			113,184
			\$20,185,140

SECONDARY SYSTEM

Gravel, Pavement and Major Bridges	(B)	153.798 miles	\$ 7,825,490
Major Bridges (A)			280,291
Gravel and Pavement (B)		32.064 miles	904,645
Grade, Gravel and Bridges (A)		8.323 miles	870,672
Grade and Gravel (A)		56.487 miles	2,696,613
Approaches and Bridges (A)		0.056 miles	53,473
Bituminous Seal Coat (A)		161.201 miles	262,438
			\$12,893,655

(A) Contracts let for that work only

(B) Includes light surface oiling
Incidental minor work is included

In addition to the work on the Interstate, Primary, and Secondary Systems, the field construction forces supervised and inspected contracts for right-of-way fence, maintenance stockpiles, building construction, and other miscellaneous work.

The table on Page 29 gives a tabulation of projects constructed under supervision of the Bureau of Public Roads. This work is included here because these roads are a part of the State Highway System.

The columns in the tabulations on the following pages are numbered and some data therein is abbreviated. Cost data is shown to the nearest dollar. Some of the figures in Column 8 are estimated.

Column O shows county, or counties, in which the project is constructed.

Column 1 carries an identification number which is used on the map on Page 29 to show the location of the project. Sometimes several contracts will be shown under one number.

Column 2 shows the various project numbers which are used in all construction and accounting records.

Column 3 gives the length of the project. If it is road work, the length is in miles to three decimal points; if a bridge, the length is in feet. If bridges are included in roadway work then their separate length is shown in parentheses.

Column 4 shows the type or kind of work let to contract. The work descriptions have been abbreviated as explained below:

GD—Grade and Drain
GS—Gravel or Graveled
MB—Major Bridges, Underpasses, Overpasses, etc.
TT—Treated Timber Bridges
CSB—Cement Stabilized Base
FC—Fence
TC—Traffic Control
SN—Signs
SI—Signals
SN-D—Signs and Delineation
BST—Light Bituminous Surface Treatment
BRM—Bituminous Road Mix
BPM—Bituminous Plant Mix
BSC—Bituminous Seal Coat
PCP—Portland Cement Concrete Pavement
S—Seeding
SF—Seed and Fertilizer
SL—Signals and Lights
GR—Guard Rail

All bituminous treatments or mixes are a combination of bitumen (road oil) and gravel or crushed rock. "MB", when used alone, means steel and concrete. Major timber bridges are symbolized by "MB(TT)".

Column 5 shows the date of letting—month and year.

Column 6 shows the amount of the contract, as awarded.

Column 7 shows the date of physical completion of project.

Column 8 shows the final cost of the construction work as paid to the contractor.

The map on Page 31 shows the location of all highway construction projects completed during the biennium.

PROJECTS ON INTERSTATE SYSTEM

0	1	2	3	4	5	6	7	8
County	Ident. Number	Project Number	Project Length	Type of Work	Date of Letting	Amount of Contract	Date Completed	Final Contract Amount
Mineral	1	I 90-1(6) 43 U-1	(1) 6.686	GD-GS-BPM-BSC-GR	1-60	\$ 1,096,572	7-62	\$ 1,105,339
Lewis & Clark	2	I-IG-ING 15-4(4) 182 U-2	(a) 2.618	GD-GS-BPM-GB-MB (521.0')	9-60	1,071,546	7-62	1,064,045
Park	3	I-IG 90-7(9) 327 U-1	(a) 11.823	GD-GS-BPM-GR	12-60	3,110,873	9-62	2,997,624
Park	3	I-IG 90-7(9) 327 U-3	(a)	FC	12-60	66,180	9-62	64,710
Beaverhead	4	I 15-1(11) 37 U-1	7.755	GD-GS-BPM-GR	3-61	1,043,487	10-62	1,028,704
Beaverhead	4	I 15-1(11) 37 U-3		FC	3-61	29,998	10-62	31,801
Cascade	5	I 15-5(13) 239 U-1	9.702	GD-GS-BPM-GB	3-61	1,741,788	7-63	1,740,793
Cascade	5	I 15-5(13) 239 U-3		FC	3-61	60,051	6-63	64,092
Custer	6	I 94-4(6) 136 U-1	(a) 11.597	GD-GS-PCP-BPM-GR-MB (232.0')	4-61	2,710,114	11-62	2,652,478
Custer	6	I 94-4(6) 136 U-2		FC	4-61	62,799	12-62	67,747
Gallatin	7	I-IG 90-6(2) 309 U-1	5.275	GD-GS-BPM-GR-MB (1,152.0')	5-61	4,058,436	12-63	4,347,164 (*)
Gallatin	7	I-IG 90-6(2) 309 U-2		FC	5-61	39,886	10-63	39,316
Lewis & Clark	8	I 15-4(9) 194 U-1	12.663	GD-GS-BPM-GR-MB (236.0')	6-61	3,788,849	11-63	3,425,772 (*)
Lewis & Clark	8	I 15-4(9) 194 U-2		FC	6-61	79,149	11-63	77,443
Lewis & Clark	9	I 15-4(10) 182	(a)	SN	6-61	53,271	8-62	56,246
Rosebud & Custer	10	I 94-3(3) 114 U-1 & I 94-4(9) 119 U-1	6.246	GD-GS-BPM-GR	7-61	829,372	11-62	\$10,485
Rosebud & Custer	10	I 94-3(3) 114 U-3 & I 94-4(9) 119 U-2		FC	7-61	31,598	4-63	32,848
Custer	11	I 94-4(8) 120 U-1	7.308	GD-GS-BPM-GR	7-61	1,302,922	11-62	1,255,706
Custer	11	I 94-4(8) 120 U-3		FC	7-61	47,215	11-62	49,079
Silver Bow	12	I 15-2(14) 127 U-1	(a) 2.708	GD-GS-PCP-BPM-BSC-GR	8-61	1,650,440	11-63	1,627,448 (*)
Silver Bow	12	I 15-2(14) 127 U-2		FC	8-61	62,087	11-63	65,650
Lewis & Clark	13	I 15-1(12) 207 U-1	3.388	GD-GS-BPM-GR-FC	10-61	2,110,638	8-63	2,099,577 (*)
Lewis & Clark	13	I 15-4(12) 207 U-2	289'	MB	10-61	89,446	7-62	87,983
Wibaux	14	I 94-7(3) 240	622'	MB	10-61	169,195	11-62	166,583
Wibaux	15	I 94-7(4) 233 U-1	7.169	GD-GS-BPM-GR-FC	10-61	1,054,733	6-63	1,010,385
Wibaux	15	I 94-7(4) 233 U-2	8.051	GD-GS-BPM-GR-FC	10-61	1,113,400	11-62	1,095,285
Lewis & Clark	2	I 15-4(6) 186 U-3	440.5'	MB	12-61	130,183	10-62	128,659
Yellowstone & Treasure	16	I 94-1(5) 51	580'	MB	12-61	294,402	8-63	291,958
Stillwater	17	IG 90-8(13) 395	248.5'	MB	1-62	92,851	11-62	92,952
Missoula	23	I-IG 90-2(12) 118 U-1	706'	MB	2-62	223,015	7-63	220,805
Sweetgrass & Stillwater	17	I 90-7(8) 387 U-2 & I-IG 90-8(12) 388 U-3	524.5'	MB	3-62	251,586	5-63	245,278
Silver Bow	12	I-IG 15-2(17) 130 U-1	(a) 1.470	GD-CSB-PCP-BPM-GR	4-62	687,830	11-63	661,963 (*)
Silver Bow	12	I-IG 15-2(17) 130 U-2	652'	MB	4-62	227,823	7-63	224,749
Silver Bow	12	I-IG 15-2(17) 130 U-3		FC	4-62	18,125	11-63	18,124
Lewis & Clark	19	I 15-4(6) 186 U-1	(a) 8.170	GD-BS-BPM-GB	4-62	1,840,620	12-63	1,713,350
Lewis & Clark	19	I 15-4(6) 186 U-2	150'	MB	4-62	77,437	10-62	76,194
Lewis & Clark	19	I 15-4(6) 186 U-4		FC	4-62	40,106	3-64	40,817
Lewis & Clark	19	I 15-4(14) 185		SN	4-62	18,975	2-63	19,045
Cascade	5	I 15-5(17) 239		SN	4-62	21,450	6-63	21,442
Missoula	23	I-IG 90-2(12) 118 U-2	284.5'	MB	4-62	91,717	6-63	90,380
Missoula	23	I-IG 90-2(12) 118 U-3	246'	MB	5-62	87,268	10-62	87,157
Yellowstone	20	I 90-8(16) 437 U-2	74'	MB	5-62	43,334	4-63	42,464
Beaverhead	4	I 15-1(15) 37		SN	6-62	20,605	11-62	20,691
Gallatin	7	I 90-6(6) 309		SN	6-62	20,839	10-63	20,907
Park	3	I 90-7(10) 327		SN	6-62	68,541	12-62	69,231
Yellowstone & Treasure	16	I 94-1(6) 50 U-1 & I 94-2(4) 51 U-1	5.477	GD-GS-BPM-GR	6-62	1,034,577	11-63	1,072,429
Treasure	16	I 94-2(4) 51 U-2	178'	MB	6-62	53,882	5-63	53,289
Yellowstone & Treasure	16	I 94-1(6) 50 U-2 & I 94-2(4) 51 U-3		FC	6-62	35,844	11-63	36,473
Rosebud & Custer	10	I 94-3(7) 114	(a)	SN	6-62	74,737	6-63	79,073
Mineral & Powell	1	I 90-1(16) 43 & I 90-3(11) 180	(a)	SF	7-62	26,444	5-63	23,862

PROJECTS ON INTERSTATE SYSTEM

0	1	2	3	4	5	6	7	8
County	Ident. Number	Project Number	Project Length	Type of Work	Date of Letting	Amount of Contract	Date Completed	Final Contract Amount
Dawson	21	1 94-6(4) 216 (a)		S	7-62	4,143	11-62	3,632
Mineral & Missoula	18	1 90-1(17) 75 U-1 & 1 90-2(13) 78 U-1	4.058	GD-BPM-GR	8-62	1,304,345	12-63	1,194,497
Mineral & Missoula	18	1 90-1(17) 75 U-2 & 1 90-2(13) 78 U-2	342.5'	MB	8-62	115,983	7-63	114,585
Mineral & Missoula	18	1 90-1(17) 75 U-3 & 1 90-2(13) 78 U-3		FC	8-62	47,094	12-63	41,130
Gallatin	22	1-IG 90-6(5) 276 U-1	5.495	GD-MB (234.5')	9-62	1,202,854	11-63	1,166,401
Gallatin	22	1-IG 90-6(5) 276 U-2		FC	9-62	31,899	12-63	32,398
Gallatin	22	1-IG 90-6(7) 278	542.0'	MB	9-62	181,131	9-63	176,963
Gallatin	22	1-IG 90-6(8) 277	479.1'	MB	9-62	159,279	8-63	156,119
Wilbax	14	1 94-7(5) 233		SN	10-62	27,438	7-63	27,461
Yellowstone	20	1 90-8(23) 447 U-1	0.063	G-RIPRAP	11-62	49,344	2-63	46,327
Missoula	23	1-IG 90-2(10) 110 U-4	693.0'	MB	12-62	217,462	12-63	214,656
Lewis & Clark	9	1 15-4(15) 186, 1 15-4(16) 194 (a)	24.221	SN	1-63	36,577	6-64	35,349(*)
Note (2)		1 15-1(16) 37, 1 15-2(15) 118 (a)		SF	2-63	24,088	4-63	25,104
Cascade	5	1 15-5(18) 239		SF	2-63	26,055	4-63	24,302
Yellowstone	20	1 90-8(15) 438		SF	2-63	11,975	5-63	11,538
Note (3)		1 15-1(11)37U4, 1-IG 15-4(4)182U5 (a)	23.616	BSC	4-63	114,021	9-63	97,313
Note (4)		1 15-5(13) 239 U-4 (a)	9.702	BSC	4-63	32,630	8-63	28,397
Carbon & Big Horn		1 94-3(3)114U4, 1 94-4(6)136U3 (a)	25.151	BSC	4-63	57,866	7-63	48,613
Note (5)		1 94-7(4) 233 U-3 (a)	15.275	BSC	4-63	44,762	8-63	37,839
Totle	24	1 15-8(14) 357 U-2	286.0'	MB	5-63	102,584	6-64	100,279(*)
Mineral & Missoula	18	1 90-1(20) 75 & 1 90-2(19) 78		SN	6-63	14,083	12-63	14,525
Gallatin & Lewis & Clark		1 15-4(11) 182 & 1 90-6(12) 309		S	7-63	25,186	5-64	39,839(*)
Missoula	23	1 90-2(23) 110	244.5'	MB	7-63	68,112	5-64	67,261
Rosebud & Custer	10, 11	1 94-3(8) 114 & 1 94-4(11) 119 (a)		SF	7-63	24,155	5-64	33,535
Wilbax	14, 15	1 94-7(6) 233		SF	7-63	15,335	5-64	13,296
Pondera & Teton	25	1 15-6(7) 311 & 1 15-7(5) 312		SF	11-63	16,474	5-64	15,793(*)
Mineral, Missoula & Lake		1 90-1(23) 75 & 1 90-2(26) 78 (a)		S	12-63	2,311	5-64	2,204(*)
Custer	6	1 94-4(13) 136	0.502	Reshape & Bank Protection	12-63	97,204	3-64	136,914
Silver Bow	12	1 15-2(20) 127		S	3-64	4,130	5-64	5,645(*)
TOTAL						\$37,014,756		\$36,329,510

(a) Represents contracts combined and let together with other projects on the Interstate, Primary and/or Secondary Systems.

(1) Includes Replacement of Superior Airport. Cost: \$109,872.

(2) Beaverhead, Silver Bow, Deer Lodge and Park Counties.

(3) Lewis & Clark, Beaverhead, Park, Powell, Broadwater and Jefferson Counties.

(4) Cascade, Hill, Chouteau and Teton Counties.

(5) Wilbax, Roosevelt, Valley and Sheridan Counties.

(*) Final checking and payment not completed. Figures as shown represent approximate final amount to be paid, taken from the Semi-Final Estimate.

PROJECTS ON PRIMARY SYSTEM

0	1	2	3	4	5	6	7	8
County	Ident. Number	Project Number	Project Length	Type of Work	Date of Letting	Amount of Contract	Date Completed	Final Contract Amount
Park	101	F 185 (6) U-1	(a) 0.264	GD-GS-BPM	12-60	\$ 24,092	9-62	\$ 22,242
Park	101	F 185 (6) U-3	(a)	FC	12-60	641	9-62	532
Fergus	102	F 26 (6) U-1 & F 333 (27) U-1	11.218	GD-CBS-BPM	2-61	723,297	7-62	716,324
Lake	103	F 191 (20) U-1	7.300	GD-GS-BPM	3-61	281,157	7-62	283,681
Custer	104	F 86 (20) U-1	(a) 0.845	GD-GS-BPM	4-61	139,262	11-62	133,896
Valley	105	F 144 (6) U-1	(a) 4.692	GD-GS-BPM-TT (38.0')	5-61	759,154	8-62	754,125
Lewis & Clark	106	U 249 (14) U-1 & U-UG 376 (3) U-1	0.513	GD-GS-PCP-BPM-MB (206.0')	5-61	300,716	11-62	300,147
Cascade	107	F 180 (4) & U 277 (5)	3.198	GD-GS-BPM-BSC	6-61	239,875	8-62	247,272
Lewis & Clark	106	F 214 (4)	(a)	SN	6-61	7,967	8-62	8,573
Fergus	108	F 103 (10) U-1 & F 333 (28) U-1	11.452	GD-CSB-BPM-TT (189.0')	6-61	688,620	11-62	699,215
Custer	109	F 156 (10) U-1 & F 156 (11) U-1	13.187	GD-GS-BPM	6-61	759,600	8-62	761,348
Beaverhead	110	F 42 (1) U-1	9.226	GD-GS-BPM	7-61	699,595	10-62	705,065
Beaverhead	110	F 42 (1) U-2	214.5'	MB	7-61	69,600	7-62	68,465
Silver Bow	111	F 207 (8) & F 279 (4)	(a) 0.653	GD-GS-BPM-BSC	8-61	76,269	11-63	79,975
McCone	112	F 315 (15)	12.052	GD-GS	8-61	565,457	12-62	544,129
Missoula	113	F-FG 215 (7)	0.252	GD-GS-BPM-BSC-MB (972.0')	9-61	988,381	7-63	982,839
Roosevelt	114	F 84 (30) U-1	10.851	GS-BPM	11-61	234,300	8-62	242,966
Custer	104	F 157 (16) U-2	102.0'	MB	11-61	34,757	9-62	34,212
Yellowstone	115	U-FG 228 (16)	1.466	GD-GS-CSB-BPM-PCP-BSC-MB	11-61	1,043,348	11-63	1,074,016
Lewis & Clark	106	U 249 (14) U-2 & U-UG 376 (3) U-2		SN	11-61	15,541	1-63	15,380
Cascade	108	F 65 (8) U-1	1.232	GD-GS-BST	12-61	58,464	9-62	59,766
Lewis & Clark	116	F 238 (8) U-1	8.476	GD-GS-BPM	12-61	637,044	7-63	608,703
Lewis & Clark	116	F 238 (8) U-2	294.0'	MB	12-61	133,734	5-63	131,636
Valley	105	F 144 (6) U-2		SN	12-61	14,881	2-63	14,072
Custer	117	F 157 (16) U-1	5.000	GD-GS-BPM	1-62	296,316	7-63	295,189
Cascade	107	F 180 (5)	(a) 1.080	GD-GS-BPM-BSC	1-62	44,904	10-62	49,814
Missoula	118	F-FG 219 (16) U-2	173.0'	MB	3-62	61,618	7-63	58,522
Note (1)		F 13 (6) U-2, F 43 (15) U-2	(a) 59.348	BSC	4-62	113,776	5-63	106,374
Flathead & Ravalli		F 191 (21) U-2, F 259 (9) U-2	(a) 21.745	BSC	4-62	42,776	7-62	41,921
Cascade & Judith Basin	119	F 235 (27) U-2	(a) 5.113	BSC	4-62	12,516	8-62	10,381
Dawson & Fergus		F 246 (9) U-2, F 333 (29) U-2	(a) 21.062	BSC	4-62	45,757	8-63	39,596
Flathead	120	F 191 (19) U-1	5.548	GD-GS-BPM	4-62	968,935	8-63	1,107,955
Fergus	121	U 112 (3), U 229 (15) & U 235 (32)	1.976	GD-GS-BPM-BSC-GR	4-62	319,925	7-63	344,655
Glacier	122	F 260 (7) & F 353 (8)	5.761	GD-GS-BPM	4-62	794,267	9-63	882,167
Chouteau	123	F 149 (16)	9.726	GD-GS-BPM	5-62	603,124	7-63	606,803
Yellowstone	115	U-F 296 (15) U-2	35.0'	TT	5-62	17,742	1-63	18,191
Toole & Liberty	124	F 62 (11)	8.249	BPM	6-62	195,021	10-62	190,755
Dawson	125	F 213 (4)		Bridge Repair	6-62	117,500	1-63	113,184
Powell & Lake		F 184 (15) & F 191 (22)	(a) 8.431	S	7-62	3,623	5-63	3,229
Dawson & McCone		F 246 (10) & F 391 (14)	(a) 18.333	S	7-62	11,619	11-62	10,067
Valley & Roosevelt		F 84 (31) & F 189 (7)	(a) 26.370	S	7-62	8,029	10-62	7,337
Flathead & Lake	120	F 191 (20) U-2	(a) 7.300	BSC	7-62	19,004	9-62	15,298
Flathead	126	U 257 (14) U-2	1.068	SN-SG	7-62	34,322	6-63	34,302
Yellowstone	115	U-F 296 (15) U-1	4.181	GD-GS-BPM	7-62	1,333,453	12-63	1,277,623
Sheridan	127	F 193 (12)	11.592	GD-GS-BPM	8-62	703,717	10-63	727,148
Fergus	128	F 333 (31)	173.0'	MB	8-62	86,411	2-63	82,615
Petroleum & Fergus	129	F 28 (4)	5.833	GD-GS-BPM	9-62	551,588	11-63	549,266
Phillips	130	F 153 (8)	8.990	GD-GS-BPM	9-62	647,912	11-63	631,937
Carbon	131	F-FG 258 (12)	12.924	BPM	9-62	186,808	5-63	165,980
McCone	132	F 315 (16) U-1	11.420	GD-GS	9-62	828,674	10-63	755,277

PROJECTS ON PRIMARY SYSTEM

0	1	2	3	4	5	6	7	8
County	Ident. Number	Project Number	Project Length	Type of Work	Date of Letting	Amount of Contract	Date Completed	Final Contract Amount
Pondera	133	F 67 (9)	1,615	GD-CSB-BPM	10-62	386,194	11-63	405,822
McCone	132	F 315 (16) U-2	133.0'	MB	10-62	46,935	9-63	46,424
Petroleum & Fergus	129	F 28 (3)	5,833	FC	11-62	13,031	12-63	14,557
Gallatin	135	F 76 (5)	20,553	BPM	11-62	383,231	8-63	344,505
Cascade	107	U 149 (15) & U-F 395 (6)	1,856	GD-CSB-BPM-PCP-MB (181.7')	11-62	891,231	12-63	844,823 (*)
Deer Lodge	134	F-FG 68 (12) U-2	296.0'	MB	12-62	158,717	6-64	156,689 (*)
Beaverhead & Park		F 43(18), F 185(7) & F 217(15) (a)	4,871	SF	2-63	2,108	4-63	2,169
Fergus		F 26 (7), F 103 (10) (a)	34,502	SF	2-63	9,833	5-63	10,352
Fergus & Meagher		F 26 (6) U-2, F 103 (10) U-2 (a)	22,670	BSC	4-63	45,025	6-63	40,028
Note (2)		F 42 (1) U-3, F 185 (6) U-2 (a)	10,275	BSC	4-63	21,340	9-63	18,075
Custer		F 86 (20) U-2, F 156 (10) U-2 (a)	14,032	BSC	4-63	27,448	7-63	22,537
Wilboux		F 84 (30) U-2 (a)	10,851	BSC	4-63	22,546	8-63	19,848
Custer		F 157 (19)	10,937	GS-BPM-MB (121.5')	5-63	717,295	6-64	691,516
Silver Bow	111	U-F 242 (16)	0.816	GD-GS-BPM	5-63	132,106	11-63	130,717
Sanders	136	F 87 (12)	0.893	BPM	6-63	214,408	6-63	198,568
Fergus	137	F 103 (12)	20,416	BPM	6-63	342,696	10-63	339,710
Yellowstone	115	F 187(13), F 230(7) & U 296(14)	0.600	SN-L	6-63	16,018	1-64	17,214
Custer	104	F 86 (22) & F 135 (18) (a)	1,415	S	7-63	448	5-64	506
Big Horn & Yellowstone	138	F 46 (6)	11,309	BPM	7-63	163,883	11-63	152,128
Note (3)		F 144 (8), F 153 (9) (a)	48,746	S	8-63	21,098	4-64	18,791
Powell	139	F 249 (15)	0.552	GD-Sihle Removal	10-63	56,463	3-64	47,478
Lake		F 219 (19) (a)	5,496	S	12-63	1,315	5-64	1,327 (*)
Cascade		F 388 (7)		L	12-63	7,342	6-64	7,188
TOTAL						\$20,225,808		\$20,185,140

(a) Represents contracts combined and let together with other projects on the Interstate, Primary and/or Secondary Systems.

(1) Park, Beaverhead, Deer Lodge and Silver Bow Counties.

(2) Beaverhead, Lewis & Clark, Park, Powell, Jefferson and Broadwater Counties.

(3) Valley, Phillips, Sheridan and McCone Counties.

(*) Final checking and payment not completed. Figures as shown represent approximate final amount to be paid, taken from the Semi-Final Estimate.

PROJECTS ON SECONDARY SYSTEM

0	1	2	3	4	5	6	7	8
County	Ident. Number	Project Number	Project Length	Type of Work	Date of Letting	Amount of Contract	Date Completed	Final Contract Amount
Ravalli	201	S 328 (1)	1.215	GD-GS-BRM-MB (371.0')	4-61	\$ 228,546	9-62	\$ 213,937
Valley	202	S 368 (13) & S 368 (14)	2.068	GD-GS-BPM	5-61	90,107	8-62	88,078
Dawson	203	S 32 (11)	7.408	GD-GS-BPM	6-61	291,558	7-62	278,244
Sheridan	204	S 73 (4) U-1	8.444	GD-GS-BPM	6-61	314,416	7-62	313,529
Madison	205	S 167 (6)	4.978	GD-GS-BST	6-61	341,016	9-62	335,111
Missiona	206	S-SG 272 (2)	1.731	GS-BPM-BSC	7-61	46,332	7-62	44,237
Chouteau	207	S 290 (12)	1.668	GD-GS-BPM-BSC-MB (708.0')	7-61	326,261	7-63	315,559
Powell	208	S 291 (6) U-1	5.106	GD-CSB-BPM	7-61	336,919	10-62	329,972
Broadwater	209	S 6 (4) U-1	7.027	GD-GS-BPM	8-61	319,862	10-62	319,287
Garfield	210	S 258 (4)	7.820	GD-GS	9-61	181,267	11-62	186,452
Petroleum	211	S 369 (2)	0.991	GD-GS-MB (131.5')	9-61	61,866	7-62	92,116
Big Horn	212	F.L.H. 9 (1) U-1	5.200	GD-GS-BPM-BSC	10-61	330,528	8-62	317,524
Meagher	213	S 49 (7) U-1	8.979	GD-GS-BPM-TT (29.0')	10-61	291,072	7-62	264,141
Lincoln	214	S 325 (1) U-2	121.5'	MB	11-61	46,020	7-62	46,404
Powder River	215	S 333 (2)	5.260	GD-GS	11-61	185,758	11-62	194,406
Golden Valley	216	S 71 (4)	0.512	GD-GS-MB (141.5')	12-61	72,786	8-62	69,720
McCone	217	S 238 (1) U-2	269.0'	MB	12-61	68,834	10-62	68,013
Toole	218	S 366 (6)	4.073	GD-GS	12-61	126,201	9-62	110,544
Cascade	219	S US 386 (1)	2.615	GD-GS-BPM-BSC	1-62	207,045	10-62	218,616
McCone	217	S 238 (1) U-1	6.586	GD-GS	1-62	164,483	12-62	158,132
Sanders	220	S 221 (2)	5.189	GD-GS	2-62	224,289	12-62	253,428
Hill	221	S 301 (8) U-1	4.993	GD-GS-BPM	2-62	216,400	8-62	210,289
Musselshell	222	S 309 (1)	7.824	GD-GS	2-62	177,086	9-62	172,204
Big Horn	212	F.L.H. 9 (1) U-2	4.400	GD-GS-BPM-BSC	3-62	219,747	9-62	209,159
Rosebud	223	S 259 (2) U-1	9.033	GD-GS-BPM-TT (38.0')	3-62	418,119	6-63	287,329
Chouteau	224	S 290 (13) U-1	9.506	GD-GS-BPM	3-62	388,572	10-62	362,095
Jefferson & Park		S 9 (9) U-2	(a) 10.493	BSC	4-62	18,210	7-63	16,718
Lake	226	S 65 (4) U-2	(a) 4.858	BSC	4-62	10,581	7-62	8,121
Cascade	227	S 329 (4) U-2	(a) 10.276	BSC	4-62	21,569	8-62	17,580
Note (1)		S 8 (10) U-2 & S 68 (4) U-2	(a) 33.586	BSC	4-62	70,033	8-62	59,544
Silver Bow	228	S 213 (4)	(a) 0.634	GD-GS-BPM	4-62	44,609	11-63	42,401 (*)
Lewis & Clark	229	S 2 (15) U-1	(a) 1.824	GD-GS-BPM	4-62	83,854	12-63	81,516 (*)
Big Horn	212	F.L.H. 9 (1) U-3	65.0'	MB	4-62	24,985	7-62	24,871
Blaine	230	S 12 (9)	4.866	GD-GS-BPM-BSC	4-62	288,160	8-63	280,021
Teton	231	S 82 (1) U-1	5.901	GD-GS-BPM	4-62	211,263	10-62	213,402
Valley	232	S 239 (2) U-1	13.422	GS-BPM	4-62	290,595	10-62	278,793
Liberty	233	S 339 (9) U-1	6.500	GD-GS-BPM	4-62	421,230	7-63	396,986
Fallon	234	S 398 (2)	9.640	GD-GS	4-62	237,418	8-63	227,632
Fergus	235	S 68 (5) U-1	13.011	GS-BPM	6-62	327,342	6-63	342,316
Flathead	236	S 377 (2)	4.021	GD-GS-BPM	6-62	456,815	8-63	456,815
Cascade	237	S 77 (6)	0.505	GD-GS-MB (141.5')	6-62	81,652	11-62	77,095
Toole	238	S 188 (4)	10.095	GD-GS	6-62	246,315	6-63	225,799
Roosevelt	239	S 402 (3)	7.778	GD-GS-BPM-BSC	6-62	294,424	9-63	292,373
Flathead	240	S 7 (6) U-2	6.549	BSC	7-62	22,053	9-62	17,467
Pondera	241	S 131 (3) U-1	6.526	GD-GS-BPM	7-62	297,051	8-63	293,140
Lincoln	242	S 325 (1) U-1	3.358	GD-GS-BPM	7-62	217,754	8-63	232,542
Big Horn	242	S 207 (3)	3.900	GD-BPM	8-62	247,377	7-63	239,299
Rosebud	243	S 45 (6)	214.5'	MB	10-62	79,265	9-63	77,332
Garfield	244	S 264 (3)	5.290	GD-GS	10-62	121,215	6-63	118,725
Glacier	245	S 266 (4)	10.464	GD-GS-BPM	10-62	544,724	8-63	511,321

PROJECTS ON SECONDARY SYSTEM

0	1	2	3	4	5	6	7	8
County	Ident. Number	Project Number	Project Length	Type of Work	Date of Letting	Amount of Contract	Date Completed	Final Contract Amount
Glacier	246	S 316 (7)	0.437	GD-GS-BPM	11-62	70,700	9-63	66,080
Yellowstone	247	S 236 (8)	1.156	GD-GS-MB (562.0')	11-62	374,088	6-64	379,853
Phillips	248	S 150 (4)	7.445	GD-GS-BPM	12-62	250,802	9-63	250,854
Deer Lodge	249	S 304 (8)	7.408	GD-BPM	12-62	197,767	7-63	187,262
Lewis & Clark & Jefferson	250	S 412 (3)	3.696	GD-GS-BPM	1-63	302,467	9-62	308,467
Beaverhead—Note (2)	251	S 85 (00) U-1 & S 85 (3) U-1	11.967	GD-GS	2-63	652,003	10-63	616,039
Beaverhead—Note (3)	251	S 85 (00) U-2 & S 85 (3) U-2	234.0'	MB	2-63	64,723	10-63	63,674
Sweet Grass	252	S 28 (7) & S 28 (8)	8.843	GD-GR	3-63	490,254	11-63	433,282
Powder River	253	S 326 (4)	5.074	GD-GR-MB (102.0')	3-63	261,798	8-63	251,888
Meagher		S 40 (7)	(a) 8.979	BSC	4-63	16,935	9-63	14,127
Note (4)		S 6 (4) U-2, S 291 (6) U-2	(a) 14.960	BSC	4-63	26,498	9-63	13,656
Note (5)		S 13 (5) U-2, S 290 (13) U-2	(a) 25.683	BSC	4-63	57,366	8-63	45,487
Big Horn & Carbon		S 116 (2) U-2 & S 260 (3) U-2	(a) 21.951	BSC	4-63	38,686	7-63	33,316
Sheridan & Valley		S 73 (4) U-2 & S 239 (2) U-2	(a) 21.866	BSC	4-63	40,980	8-63	36,422
Big Horn		S 26 (10)	0.056	Approaches & MH (101.5')	7-63	55,144	12-63	53,473
TOTAL						\$13,471,924		\$12,893,655

(a) Represents contracts combined and let together with other projects on the Interstate, Primary and/or Secondary Systems.

(1) Richland, Phillips, Daniels and Fergus Counties.

(2) U. S. Bureau of Reclamation paid \$268,156.00 of final cost \$616,039.00.

(3) U. S. Bureau of Reclamation paid \$28,728.00 of final cost \$63,674.00.

(4) Jefferson, Lewis & Clark, Powell and Broadwater Counties. S 291 (6) U-2 cancelled by work order.

(5) Bill, Teton and Chouteau Counties.

(*) Final checking and payment not completed. Figures as shown represent approximate final amount to be paid, taken from the Semi-Final Estimate.

FOREST HIGHWAY SYSTEM PROJECTS

The U. S. Bureau of Public Roads is responsible for the construction of those portions of the State Highway System which lie within National Forests. These roads, aside from right-of-way, are constructed entirely with Federal Funds. Maintenance is done by the State. The following tabulation lists projects completed by the Bureau during the biennium.

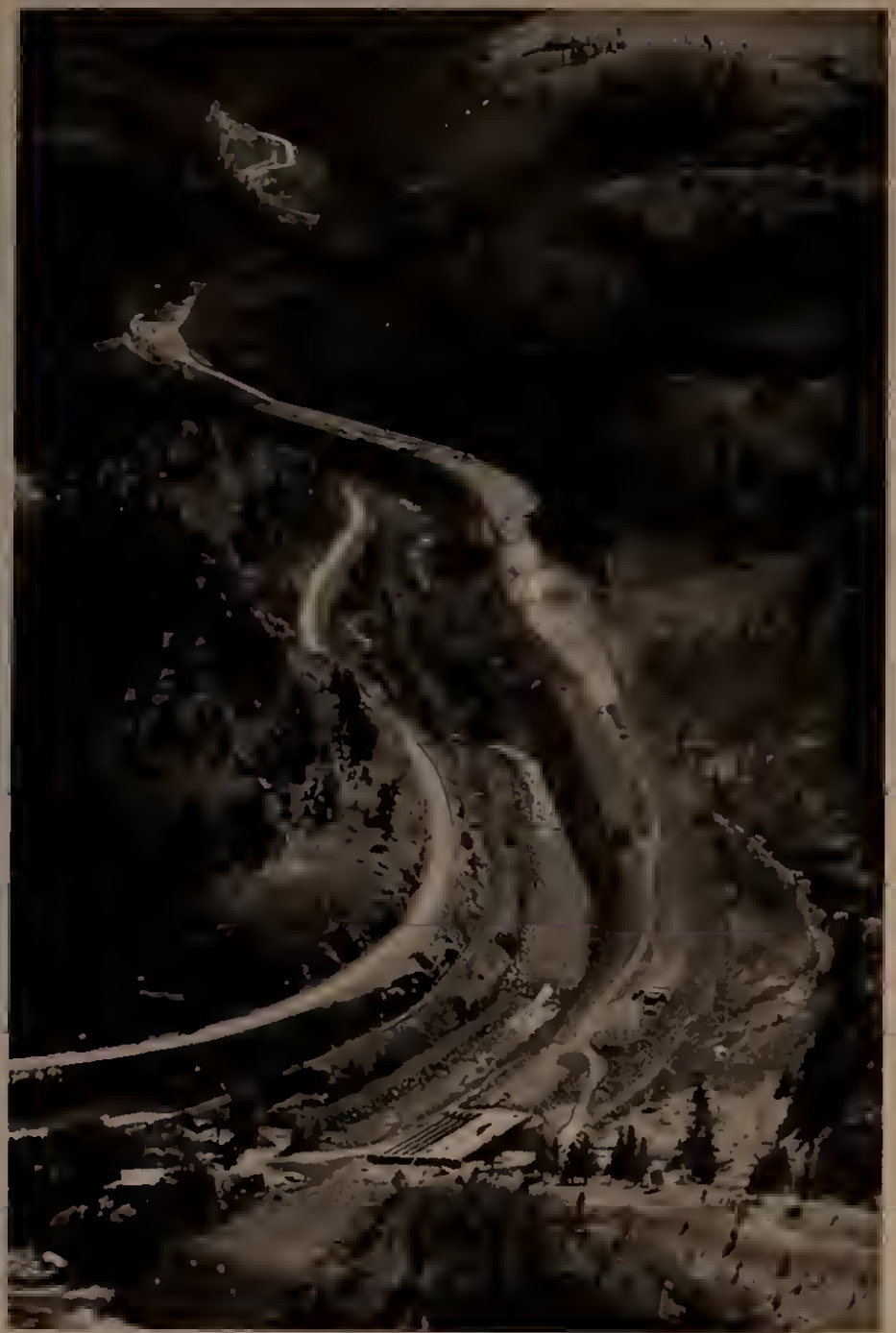
County	Ident. No.	Project Number	Length	Type of Work	Date of Award	Contract Amount	Date Completed	Final Cost
Madison	401	FHP 60-A	8.900	BST-MB	8-60	\$534,848.95	8-62	\$520,084.00
Gallatin	402	FHP 42-M-2	2.215	BST	5-61	174,971.30	8-62	180,484.00
Beaverhead	403	FHP 20-B	9.343	GD-MB	9-60	373,462.00	7-62	375,761.00
Park	404	FHP 43-1 (1)	5.765	BST	3-62	892,323.00	11-62	957,175.00
Cascade & Meagher.....	405	FHP 32-1 (1)	26.891	BPM	10-61	644,089.00	6-63	740,727.00
Sanders	406	FHP 9-1 (1)	1.381	GD-MB	12-61	454,592.00	1-63	473,642.00
Glacier	407	FHP 4A4 & 14-A	10.912	BST	10-60	693,893.00	10-62	711,212.00
Beaverhead	408	FHP 20-1 (1)	16.04	BPM	6-63	662,015.00	11-63	659,278.00
Lincoln	409	FHP 5-1 (1) 5-2 (2)	13.8	BPM	9-62	390,542.00	8-63	377,630.00

The Bureau of Public Roads also awarded contracts which were not completed as of June 30, 1964, in the following counties: Flathead, Carbon, Gallatin, Missoula, and Sanders. This work totaled 78.5 miles of roadway with a total award amount of \$3,757,114. The majority of this work will be completed by the end of the 1964 construction season.

Table "D" on Page 9 gives more data on the Forest Highway System.

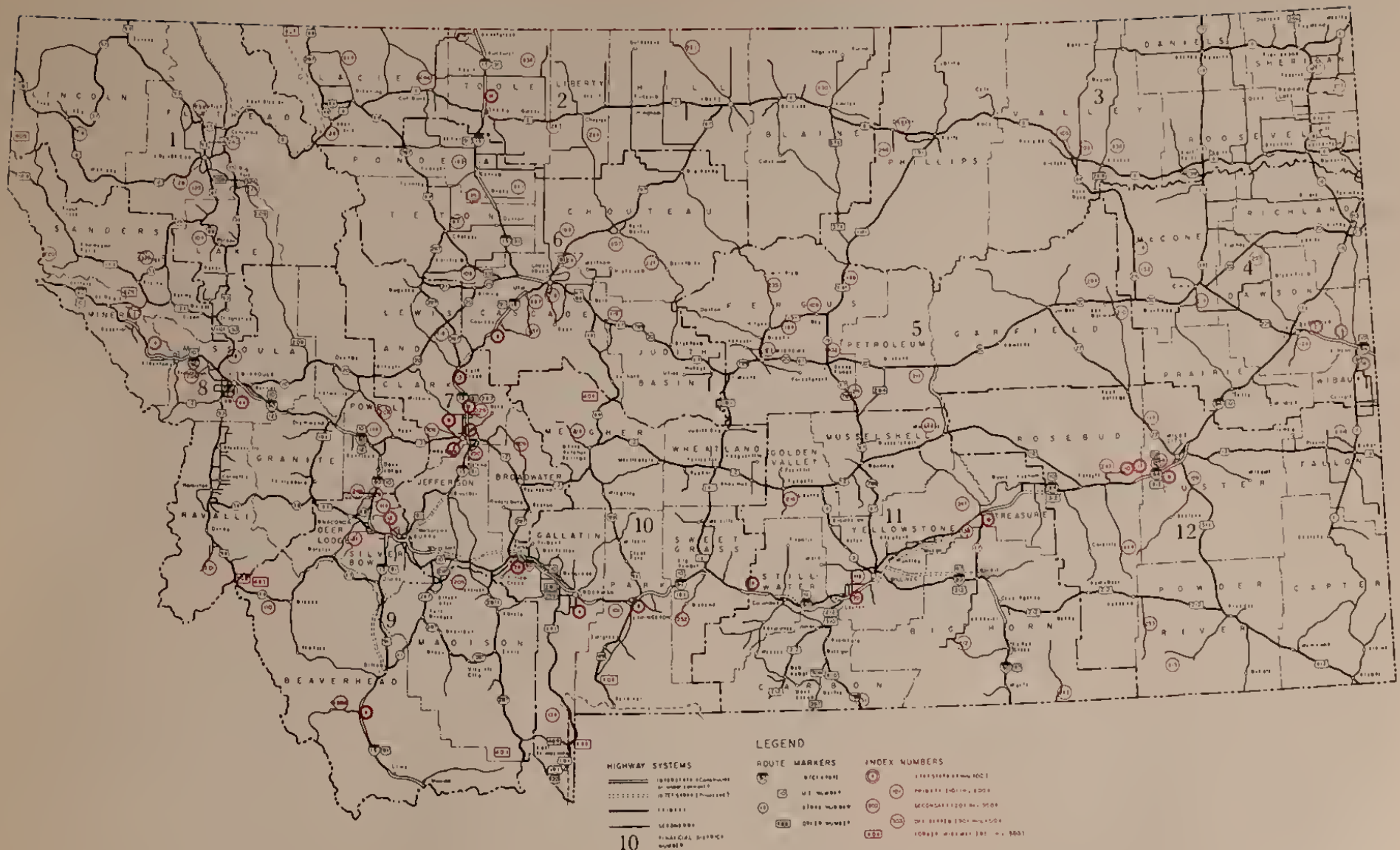


Interstate 90 entering Rocky Canyon east of Bozeman
(Bear Canyon interchange in foreground)



Construction on Interstate 15 in Wolf Creek Canyon
north of Helena.

PROJECTS COMPLETED 7-1-62 THRU 6-30-64



RIGHT-OF-WAY REPORT

In keeping with the accelerated highway construction program, the Right-of-Way Division during this biennium increased right-of-way acquisition 27% over the preceding biennium. The greatest part of this increase is reflected in the Interstate Program to keep abreast with the required completion date of the system.

A great part of Interstate right-of-way acquisition has been through or in the vicinity of the larger urban areas of the State. Urban acquisitions require considerably more work since the area of each ownership is smaller and more highly developed. A far greater number of negotiations, with attendant title search and appraisal for each, must be concluded to acquire an acre of urban right-of-way than is necessary to acquire an acre of rural right-of-way.

Right-of-way acquisitions and direct cost of such acquisitions are shown in the following tabulation:

System	No. Parcels	No. Acres	Cost of Land	Avg. Cost (Parcel)	Avg. Cost (Acre)
Interstate —	903	5960	\$7,317,676	\$8,103	\$1,227
Primary —	498	1738	1,233,704	2,427	709
Secondary —	768	2140	816,883	1,063	381
TOTALS —	2169	9838	\$9,368,263	\$4,328	\$ 952

(Figures include cost of land, improvements, damage and fence)

During this biennium, 420 condemnation cases were active; 264 cases were completed and 156 cases were in some stage of litigation at the end of the biennium.

This division continually pursues a policy of fair and amicable negotiations with landowners for the acquisition of rights-of-way. The results of this policy are demonstrated by the fact that only slightly more than 4% of the 2169 right-of-way parcels required condemnation action.

Occasionally it is necessary that personal contact be made with landowners residing in neighboring states and Canada. The State Highway Commission has authorized certain Right-of-Way personnel to travel outside the State in order to conclude negotiations with these owners. This out-of-State travel is restricted to areas within a short distance from Montana's borders. Upon several occasions, the personnel of another State Highway Department's Right-of-Way Division have been used to locate and settle with owners outside of the State.

Many of the roads constructed by the Bureau of Public Roads are parts of the State system. This Division is responsible for acquisition of right-of-way for such projects and also for emergency road projects constructed by the Bureau.

During the flood emergency in June, 1961, right-of-way personnel were required to secure rights-of-way for temporary roads to detour sec-

tions of highways and bridges destroyed by floodwaters. Earth fill and gravel materials were also acquired for permanent repair of the damaged facilities.

Purchase of buildings and other improvements must be made with right-of-way acquisitions. These improvements must be cleared from the right-of-way before construction operations begin. Attempts are made to salvage all items thus purchased. The Right-of-Way Division has, through public sales, recovered in excess of \$84,000 of the cost of improvements purchased during the last two years.

Sales of tracts of land determined to be excess and which are no longer required for present or future highway purposes have enabled a recovery of \$113,000 to the State during this biennium.

In continuation of its in-service training program, this Division has held three appraisal schools in the past two years. Intensive instruction courses are given by qualified, experienced appraisers to Right-of-Way personnel. The instruction is presented in a series of elementary and advanced courses. Employees attending the schools must qualify by written examination to receive credit. As employees advance through the courses and gain field experience, ratings and salary adjustments are made as advancement opportunities become available. Some employees have taken leave of absence and, at their own expense, have attended schools other than those presented by the Right-of-Way Division. This program has increased the quality and efficiency of our personnel.

Procedures were formulated and are now in operation to comply with the provisions of two statutes passed by the preceding Legislative Assembly.

Chapter 143 of the Session Laws of the Thirty-eighth Legislative Assembly: Upon determination of a highway location or facility pertaining thereto the Right-of-Way Division files for recording with the appropriate County Clerk and Recorder a right-of-way map showing the alignment and widths of the proposed new highway project. Books for filing these maps were designed and furnished to all Counties.

Chapter 91 of the Session Laws of the Thirty-eighth Legislative Assembly: With each deed recorded by the Right-of-Way Division conveying tracts of land not shown on previously recorded plats, a certificate of survey and a plat clearly showing the land described in the deed accompany the deed.

An additional function required by the Federal Highway Act was organized and has been in operation during the past biennium. Advisory relocation assistance to persons displaced by highway construction is available on a State-wide basis. Six permanent and one temporary Relocation Advisory Assistance offices have been in operation during this biennium. Assistance offers were made to all displaced persons. Thirty-three of such offers were accepted and relocation assistance was provided.

To better utilize critical office space, this Division designed a program to transfer its voluminous records to microfilm. This program is now in its initial stage and progressing satisfactorily. One set of film will be used in daily work and a duplicate set retained in a different area for record security purposes. The program allows daily use of the records without fear of wear, loss, fire, or other hazards.

In addition to normal workload of the Department, numerous reports were compiled for submission to the Bureau of Public Roads and Congress.

FINANCIAL REPORT

The Chief Accountant's functions, duties and responsibilities are to account for all monies received and expended from the State Highway Fund and the State Highway Trust Fund and to keep segregated records thereof; to establish cost accounting procedures which will give detailed itemization of receipts and disbursements; and to provide all financial reports and records, as required by law or administrative directive, which are needed by the State Highway Commission, State Highway Engineer, Administrative Divisions and Section Heads as they relate to the administration, construction, and maintenance of the State's highway system.

Section 32-1619 of the Montana Codes requires the establishment of the State Highway Fund, known as the 213800 Fund and the State Highway Trust Fund, known as the 410410 Fund. This statute states that the State Highway Fund shall be credited with all monies received which are for the use and purpose of the State Highway Commission, except therein provided. The State Highway Trust Fund shall be credited with all monies received from the Federal Government; and from counties, cities and other miscellaneous sources, which are received for expenditure by the Commission for the actual construction of specific projects.

Section 32-1620 of the Montana Codes requires cost accounting procedures; specifying that the Highway Commission shall provide a system of accounting for each project which shall reflect the amount of money received thereon and an itemized statement of the costs in connection therewith.

To meet the requirements of the law and to provide all necessary financial information, the Commission has empowered the Chief Accountant to establish a system whereby all monies and costs incurred will be accurately reflected in detail. The Chief Accountant, to accomplish this end, utilizes a system which is patterned after the system approved by the American Association of State Highway Officials. During the past biennium the new Accounting Manual was instituted, it updated past procedures to facilitate the processing of the greater volume of transactions due to the expanded highway program. The new Cost Accounting Coding Manual was also initiated during the biennium to simplify and standardize the coding procedure to insure an accurate flow of detail to the latest type of Accounting and Data Processing machines available.

All claims and payrolls which are presented for payment are pre-audited to assure the proper authority was given before incurrence, for legality, correctness and proper cost accounting coding.

The State's financial share of the cost of construction and reconstruction of highways, engineering and procuring of right-of-way is transferred from the State Highway Fund to the State Highway Trust Fund, from which this class of claim is paid. The State's share provides the initial funds with which to pay contractors, engineering costs and rights-of-way

purchases. Federal monies are received on a reimbursable basis after the work has been accomplished and paid for by the State and then only for its prorated share of the work actually in place at a given time.

The State Highway Commission must have an approved agreement with the Bureau of Public Roads, by project, in order for that agency to participate in any of the costs incurred. All such costs must conform to regulations and procedures set forth in the basic agreement or the Bureau of Public Roads will not participate in their share of the costs incurred.

The State can be reimbursed for the Federal share as construction progresses by the use of Concurrent Audit Vouchers which are billed weekly during heavy construction periods. However, before the State recovers the Federal share completely, all work must be completed and the project accepted by both the State Highway Commission and Bureau of Public Roads. A final Voucher is then prepared for payment and a complete audit made of all cost records before final payment. Receipt of final payment on most projects is from three to six months and may even be delayed as long as a year due to technicalities involved. The Bureau of Public Roads holds back \$5,000.00 to assure there is no overpayment prior to final voucher stage. Since the "Concurrent Audit" program has been in existence, reimbursement to the State has been greatly accelerated through the use of accounting machine billing vouchers.

The "Concurrent Audit" program, now in existence for 2 years, has greatly accelerated the reimbursement of Federal share from the Bureau of Public Roads. The Federal share on Interstate projects is approximately ninety percent of the total cost. Monthly runs by the data processing machines supply sufficient detailed sheets of each project with a breakdown to each category of construction. This process eliminates the detailed hand prepared cost analysis and the detailed auditing which was done prior to the "Concurrent Audit" program. Through these eliminations the lapse of time between incurring costs by the State and reimbursement by the Federal Government has been shortened considerably.

The Federal Government, through the Bureau of Public Roads, apportions funds to the State by systems; namely, Primary, Secondary, Interstate, and Urban. The State must match these funds by system and this matching must be further segregated by Financial District apportionment.

Receipt and expenditures accountability for the biennium, July 1, 1962, through June 30, 1964, amounted to approximately \$148,000,000. This does not include receipts and expenditures for the State Parks Division, which must be segregated from Highway Funds, the responsibility for which was given the Chief Accountant by State law.

The tables on Pages 32 and 33 show a detailed analysis of these receipts and expenditures for this biennium. On Page 34 is a graphic illustration, showing major sources of revenue and items of expenditure.

STATEMENT OF RECEIPTS AND

	Receipts			
	<u>F. Y. 1963</u>	<u>F. Y. 1964</u>	<u>Biennium</u>	<u>Total</u>
Fund Balance and Receipts				
Fund Balances July 1, 1962				
State Highway Fund 213800.....	\$10,723,560.16			
State Highway Trust Fund 410410.....	451,596.37			
Total Fund Balances July 1, 1962.....				\$ 11,175,156.73
Receipts—State Sources				
Motor Fuel Taxes.....	\$19,103,283.98	\$18,726,522.52	\$37,829,806.50	
U. S. Government Permits and Leases.....	1,018,885.94	1,003,355.84	2,022,241.78	
Gross Vehicle Weight Fees.....	3,815,095.98	3,812,422.90	7,627,518.88	
New Auto Caravan Fees.....	8,212.75	7,471.75	15,684.50	
Size and Weight Fees.....	107,708.00	112,000.00	219,708.00	
Proportional Licensing.....	63,983.08	70,275.00	134,258.08	
Violation—Special Fuel Permits.....	100.00	818.50	918.50	
Miscellaneous Income.....	9,833.88	1,106.05	10,939.93	
Gross Income—State Sources.....			47,861,076.17	
Less Legislative Appropriations.....			376,326.10*	
Total Net Receipts—State Sources.....				\$ 47,484,749.07
Federal Aid Receipts				
Preliminary Engineering Receipts.....	\$ 1,644,720.24	\$ 2,756,321.67	\$ 4,401,041.91	
Rights-of-Way Receipts.....	2,646,562.50	4,976,739.20	7,623,301.70	
Utility Relocation Receipts.....	1,640,919.38	1,306,993.94	2,947,913.32	
Construction Engineering Receipts.....	3,562,619.32	4,674,924.82	8,237,544.14	
Construction Receipts.....	29,930,882.49	34,270,520.05	64,201,402.54	
Planning Survey Receipts.....	229,076.61	562,027.99	791,104.60	
Utility Relocation Auditor.....	2,652.51	2,056.68	4,709.19	
Total Federal Aid Receipts.....				\$ 88,207,017.40
Miscellaneous Receipts				
Counties, Cities, Railroads, etc.....	\$ 360,065.57	\$ 832,174.93	\$ 1,192,240.50	
Total Miscellaneous Receipts.....				\$ 1,192,240.50
Total Receipts and Fund Balances for Biennium.....				\$148,059,164.70

*—Denotes Deduction

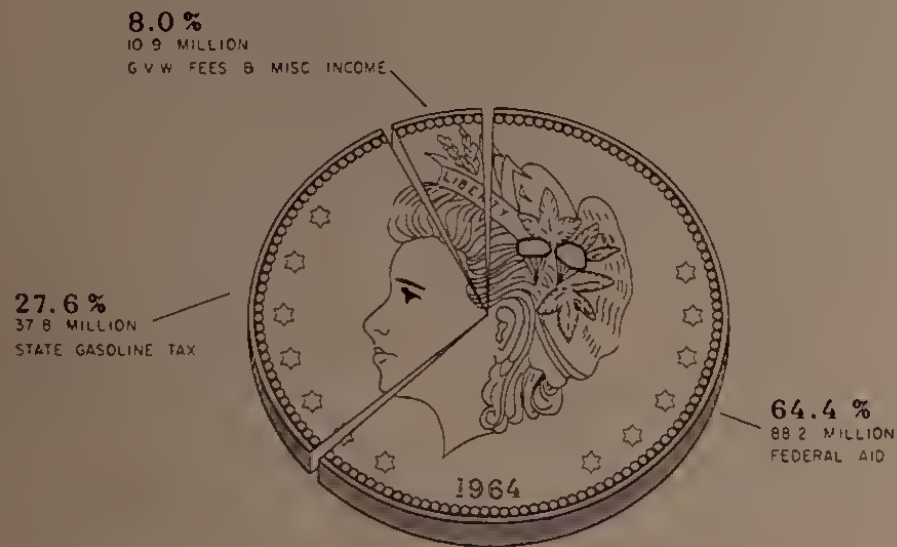
EXENDITURES FOR THE BIENNIUM

	Disbursements			Total
	F. Y. 1963	F. Y. 1964	Biennium	
Expense				
Preliminary Engineering Costs.....	\$ 3,069,210.31	\$ 2,948,921.35	\$ 6,018,131.66	
Right-of-Way Costs	5,407,693.55	7,218,309.51	12,626,003.06	
Utility Relocation Costs.....	1,375,062.57	917,554.83	2,292,617.40	
Construction Supervision Costs.....	3,237,154.39	3,908,644.11	7,145,798.50	
Construction Contract Costs	39,403,030.04	46,185,825.47	85,588,855.51	
Planning Survey Costs.....	427,831.59	570,553.72	998,385.31	
Utility Relocation Auditor Costs	6,922.99	6,482.86	13,405.85	
State Betterment Project Costs.....	240,032.15	488,415.76	728,447.91	
Maintenance	6,377,033.47	6,964,530.03	13,341,563.50	
Supervision	276,305.84	309,313.13	585,618.97	
General Administration Expense.....	874,680.39	830,830.04	1,705,510.43	
State Highway Commission Expense.....	26,880.61	30,298.32	57,178.93	
State Paid Construction Supervision Expense.....	1,283,681.31	1,562,566.11	2,846,247.42	
State Advertising Expense.....	126,008.04	125,686.65	251,694.69	
Gross Vehicle Weight Tax Collection Expense.....	153,951.49	173,434.93	327,386.42	
Regulation of Vehicle Size & Weight.....	225,622.34	302,176.57	527,798.91	
Radio Repairs & Operating Costs.....	69,021.45	74,658.66	143,680.11	
Highway Tourist Road Maps.....	75,534.91	85,663.63	161,198.54	
Miscellaneous Expense	176,379.57	327,828.90	504,208.47	
Total Expense				\$135,863,731.59
Capital Outlay				
Major Road Equipment.....	\$ 626,685.51	\$ 820,188.70	\$ 1,446,874.21	
Other Equipment	188,201.39	236,634.65	424,836.04	
Highway Buildings	201,895.38	887,983.87	1,089,879.25	
Gravel Production	421,316.91	191,318.32	612,635.23	
Maintenance & Construction Stores Inventory.....	172,481.78	511,732.45	684,214.23	
Other Capital Outlay.....	127,365.58	180,098.71	307,464.29	
Total Capital Outlay.....				4,565,903.25
Less State Owned Equipment Earnings Surplus.....				1,363,058.11*
Add Fund Balances June 30, 1964.....				\$ 8,992,587.97
Total Disbursements and Fund Balances.....				\$148,059,164.70

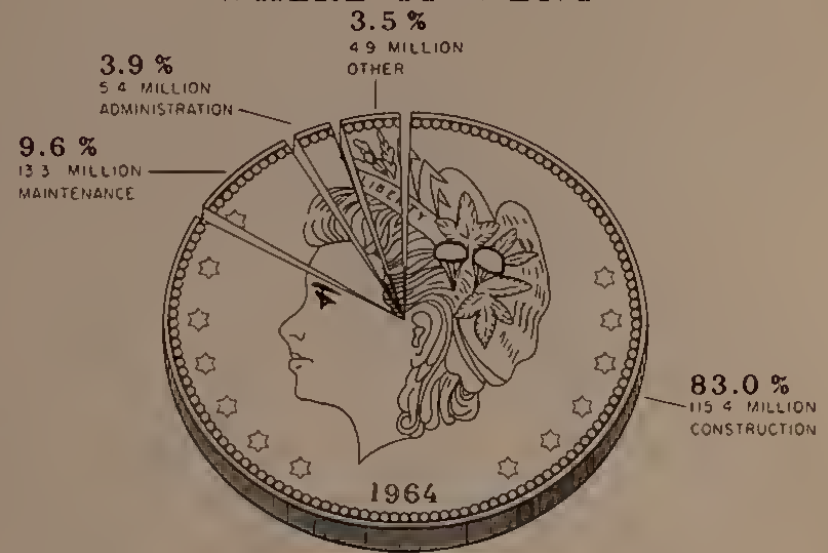
*—Denotes Deductions

THE HIGHWAY DOLLAR

WHERE IT CAME FROM



WHERE IT WENT



TOTAL HIGHWAY EXPENDITURE FOR BIENNIUM 139.0 MILLION

HIGHWAY MAINTENANCE REPORT

The Maintenance Engineer supervises a component of the State Highway Commission organization to which is assigned the principal duty of upkeep and restoration of all roads and bridges on the Interstate and Primary Systems, and selected Secondary roads, in such a manner that they may be kept in a safe and comfortable traveling condition during all seasons of the year. Incidental to this duty, the Maintenance Engineer is responsible for:

The purchase and maintenance of all equipment used by all components of the Highway Department and the keeping of records pertaining thereto, including inventories and operation costs.

The purchase and distribution of all field supplies and materials, and the keeping of Stores' records of those items kept in stock.

The purchase, construction and repair of all department buildings.

The construction and maintenance of all radio and teletype facilities used by the department.

The collection and dissemination of road information as affected by construction and weather conditions.

The State is divided into six Districts, which are further divided into Maintenance Divisions. There are eleven Maintenance Divisions in which Division Offices, shops and storage facilities are maintained. Division Engineers, under the general supervision of six District Engineers, are responsible for the maintenance of the Primary System of roads in their respective areas.

The average number of employees in the eleven Maintenance Divisions varies from approximately forty-five in the smaller divisions to ninety-five in the larger divisions. Mileage of road maintained by the Maintenance Divisions varies from 465 to 715. See Page 42. Division mileage is divided into sections, thirty to forty miles in length, each of which is manned by a sectionman and one or more helpers who perform the necessary general maintenance operations, such as patching, weed removal, roadside clean-up, ditch cleaning, drainage, maintenance of signs, snow removal and sanding. Special maintenance and betterment work, such as leveling courses, seal coating, major slide removal and major washout repair, is accomplished by combining two or more section crews, augmented by division headquarters' personnel. Division headquarters' personnel, manning reserve snow removal equipment, also assist section crews on snow removal operations when required.

The Division Engineers supervise and administer all maintenance work, stores and equipment pertaining thereto, and the operations of shop and storage facilities in each division. Division offices and shops are located at Missoula, Kalispell, Butte, Bozeman, Great Falls, Havre, Glendive, Wolf Point, Billings, Miles City and Lewistown. Storage facilities for section equipment are located at strategic places throughout the State.

In addition to maintaining shops in each division, a State Shop and Equipment Depot is maintained in Helena. This depot maintains a garage and services Helena headquarter's cars, overhauls and services striping crew equipment, rebuilds motors for exchange in motorized field equipment, maintains stores of small tools, makes shipments to field as required and fabricates standard signs for use throughout the State.

The State Shop personnel process all requisitions for equipment, supplies and materials to the State Controller, where purchase orders are prepared and materials bought. They process all invoices pertaining to the above for payment, and supervise the maintenance of stock records, equipment inventories, small tool inventories, and keep an operating cost record of all equipment.

The Radio and Teletype Section is supervised by a Communications Engineer under the direction of the Maintenance Engineer. The State communications system is well established and provides rapid and direct contact between Helena headquarters and the several divisions, between divisions, between division offices and field forces, and between radio equipped vehicles.

Maintenance expenditures, by items, for the biennium are shown on Page 40. A brief explanation of the items follows:

ITEM 1. GENERAL MAINTENANCE. General maintenance is that phase of our operations covering routine maintenance work, such as oil mat patching, weed removal, drainage, signing, guard rail repair, snow fence erection and traffic services.

ITEMS 2 and 3. SNOW REMOVAL AND SANDING. These items are General Maintenance items whose costs are kept separately.

ITEM 4. SPECIAL MAINTENANCE. Special Maintenance consists of maintenance work involving unusual expense and sometimes increased forces and additional equipment. Money for this work is allocated to divisions as required.

ITEM 5. BETTERMENTS. Betterment work consists of additions to original construction, such as gravel base, increased thickness of oil mat, guard rail, improved drainage structures, etc. Allocation of moneys for this work is made to divisions as required.

Expenditures for General Maintenance, Special Maintenance, and Betterments by Work Numbers are shown on Page 41.

ITEMS 6 to 11 represent undistributed overhead expenses. These items are self-explanatory. It will be noted that the total of items 1 through 11 is the cost of Road Maintenance only, including all overhead. A statement showing Total Cost Per Mile for General Maintenance, Special Maintenance and Betterments is shown on Page 42.

ITEMS 12 to 14. STORE ACCOUNTS. The amounts shown opposite these respective accounts reflect the increase or decrease in the stores for the period noted.

ITEM 15. EQUIPMENT RENTAL. The amount shown for this item is a reconciliation of the equipment account. State-owned equipment used on a construction project by engineering forces, or on a particular section of highway by maintenance forces, is charged to the job at an established hourly or daily rental rate. The total rentals collected on all equipment are calculated to pay the upkeep costs and cost of new equipment purchased during the fiscal year. Rentals collected in excess of repair costs, plus purchases, establishes a credit balance in this account. If rentals collected are less than repair costs plus purchases, the resultant debit balance represents a cash expenditure.

ITEMS 16 to 21 represent cash expenditures for additions, such as buildings, to present facilities, or new facilities constructed during the biennium.

ITEM 22 is included in maintenance operational costs, not chargeable to maintenance of primary roads.

ITEM 23 covers overhead charges collected on Accounts Receivable.

Salary schedules for field maintenance employees, effective during the biennium, are shown on Page 39.

The following provisions are applicable and supplementary to the wage schedules shown on Page 39.

1. Designated work week for hourly employees will be Monday through

Friday except where type of duty, such as janitor work, servicemen, watchmen, etc., requires Saturday and Sunday work, in which case the supervisor will designate the work week and employee will be given another day off in lieu of Saturday or Sunday.

2. Eight hours shall constitute a day's work and forty hours shall constitute a week's work for hourly employees and all work performed in excess of eight hours per day, or forty hours per week, or on days other than the designated work week, will be paid at the rate of time and one-half.

3. Hourly employees shall be paid eight hours at straight time for the following holidays not worked: New Year's Day, Lincoln's Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day and Christmas Day. When any of the above holidays fall on Sunday, the following Monday shall be considered as the holiday. Employees required to work on these days shall be paid at the rate of double time.

4. Employees on monthly rate will be expected to work such extra time over and above the 8-hour day and/or the 40-hour week as may be required to discharge their responsibilities.

5. Employees shall be classified strictly in accordance with the work they are performing, provided however, that employees temporarily assigned to a higher rated position for any part of a 4-hour morning or afternoon period will receive the higher rate of pay during that period.

6. Truck Drivers will be paid \$0.10 per hour additional to basic pay when engaged in snow removal operations, and \$0.14 per hour when towing 4-wheel trailers or semi-trailers mounted on fifth wheel. This does not include towing light trailers, such as spray units, tar pots, compressors, etc. This premium rate is not subject to time and one-half or double time.

7. Statutory expenses will be paid men engaged in mowing operations, equipment transfer (when not assigned to traveling crews), emergency snow removal, washouts, or other EMERGENCY assignments away from regular headquarters for short durations. This expense will be paid by claim.

8. Travel time rate \$2.52 per hour based on speed to and from work at 15 M.P.H.

9. Conditions other than noted above will conform with signed Union agreements in effect during the biennium.

WAGE SCHEDULE FOR MAINTENANCE EMPLOYEES

(For All Counties Except Cascade, Deer Lodge and Silver Bow)

	Effective 7-1-62	Effective 7-1-63		Effective 7-1-62	Effective 7-1-63
The Following is a Monthly Schedule:			Caterpillar Operator	2.99	3.17
Foreman: Division Maintenance	\$580.00	\$630.00	Distributor Driver and Leverman over 1000 gals.	2.89	3.00
Foreman: Maintenance	553.00	575.00	Loader Operator—Front End	2.87	3.11
Sectionman—Gang Foreman	540.00	575.00	Motor Patrol Operator.....	2.99	3.23
Division Mechanic	580.00	630.00	Roller Operator	2.87	3.11
Stockman	479.00	500.00	Power Chip Box Operator.....	2.87	3.11
The Following is an Hourly Schedule:			Tank Car Heater—Retort Operator.....	2.77	2.77
Blacksmith	3.03	3.03	Compressor Operator	2.71	2.71
Carpenter: Foreman	3.38	3.38	Concrete Mixer Operator	2.71	2.71
Carpenter: Journeyman	3.16	3.16	Pulvi-Mixer Operator	2.71	3.11
Mechanic—Machinist	3.03	3.11	Leverman 1000 gal. and under	2.71	2.85
Working Shop Foreman	3.08	3.16	Mower Operator	2.71	3.00
Painter: Journeyman	3.03	3.20	Spreader Box Operator	2.71	2.71
Painter: Sign	3.28	3.30	Greaser and Oiler—Serviceman	2.71	2.71
Shovel Operator	3.13	3.20	Dumpman	2.65	2.80
Hot Plant Operator	3.13	3.17	Semi-Skilled Labor	2.65	2.65
Core Drill Operator	3.13	3.13	Laborer	2.53	2.68
Powderman	2.89	3.06	Truck Driver—under 3 ton	2.65	2.70
Weed Spray Operator.....	2.87	2.87	Truck Driver—3 to 5 ton	2.65	2.80
Steam Cleaner Operator.....	2.89	3.11	Truck Driver—5 ton and over.....	2.71	2.95
Broom Operator	2.87	3.00	Snow Removal	.10	.10
			Towing		.14

MAINTENANCE EXPENDITURES

Item No.	Item	F. Y. 1963	F. Y. 1964	Biennium
GENERAL MAINTENANCE				
1.	General Maintenance All Items except 2 and 3	\$ 4,520,234.55	\$ 4,603,480.47	\$ 9,123,715.02
2.	Snow Removal	634,667.96	941,366.23	1,576,034.19
3.	Sanding	574,219.17	692,693.80	1,266,912.97
	SUB-TOTAL GEN. MAINT. LESS OVERHEAD	\$ 5,729,121.68	\$ 6,237,540.50	\$11,966,662.18
4.	SPECIAL MAINTENANCE—LESS OVERHEAD	\$ 133,206.45	\$ 166,957.07	\$ 300,163.52
5.	BETTERMENTS—LESS OVERHEAD	\$ 778,538.50	\$ 1,028,963.63	\$ 1,807,502.13
OVERHEAD CHARGES				
6.	Supervision	\$ 276,305.84	\$ 309,313.13	\$ 585,618.97
7.	Administration—Helena Shop	65,350.83	68,017.03	133,367.86
8.	Gasoline Distribution	4,460.09		4,460.09
9.	Upkeep and Repair of Maintenance Buildings	58,993.62	36,171.61	95,165.23
10.	Upkeep and Repair of Shop Equipment	6,939.33	5,663.21	12,602.54
11.	Upkeep and Repair of Radio Facilities	69,021.45	74,658.66	143,680.11
	SUB-TOTAL—OVERHEAD CHARGES	\$ 481,071.16	\$ 493,823.64	\$ 974,894.80
	SUB-TOTAL—ROAD MAINTENANCE ONLY INCL. OVERHEAD	\$ 7,121,937.79	\$ 7,927,284.84	\$15,049,222.63
STORES ACCOUNTS—INCREASE OR DECREASE				
12.	Crushed Gravel	\$ 274,180.60	\$ 507,392.76	\$ 781,573.36
13.	District Stores	100,098.48	132,361.48	232,459.96
14.	Equipment Stores	11,367.94	18,796.28	30,164.22
	SUB-TOTAL STORES INCREASE OR DECREASE	\$ 385,647.02	\$ 658,550.52	\$ 1,044,197.54
15.	EQUIPMENT ACCOUNT			
	Rental Earned	\$ 1,964,282.30Cr.	\$ 2,324,365.81Cr.	\$ 4,288,648.11Cr.
	Repair Costs	1,422,490.38	1,503,099.62	2,925,590.00
	Purchases	641,738.43	804,590.71	1,446,329.14
	SUB-TOTAL—RENTAL EXCESS OR DEFICIT	\$ 99,946.51Dr.	\$ 16,675.48Cr.	\$ 83,271.03
CAPITAL ASSET BUILDING ACCOUNTS				
16.	New Bldgs., Storage, Weighing Stations, Etc.	\$ 193,800.35	\$ 887,983.87	\$ 1,081,784.22
17.	New Fuel Oil Facilities	6,511.88	4,952.63	11,464.51
18.	New Road Oil Facilities	5,201.75	19,486.83	24,688.58
19.	New Shop Tools	9,825.44	16,560.26	26,385.70
20.	New F. M. Radio Stations	98,101.61	21,092.80	119,194.41
21.	Roadside Rest Areas		107,192.31	107,192.31
	SUB-TOTAL—CAPITAL ASSET BUILDING	\$ 313,441.03	\$ 1,057,268.70	\$ 1,370,709.73
MISCELLANEOUS				
22.	City and County Non-Reimbursable	\$ 4,213.14	\$ 35,602.76	\$ 39,815.90
23.	Miscellaneous Refunds Due	26,310.37Cr.	14,866.73Cr.	41,177.10Cr.
	SUB-TOTAL MISCELLANEOUS	\$ 22,097.23Cr.	\$ 20,736.03	\$ 1,361.20Cr.
	TOTAL CASH OUTLAY—MAINTENANCE EXPENDITURES	\$ 7,898,875.12	\$ 9,647,164.61	\$17,546,039.73

MAINTENANCE EXPENDITURES BY WORK NUMBERS

Work No.	Work Description	F. Y. 1963	F. Y. 1964	Biennium
1	Dirt Surfaces	\$ 15,477.99	\$ 25,572.68	\$ 41,050.67
2	Gravel Surfaces	25,386.35	26,421.46	51,807.81
4	Oiled Surfaces	2,796,177.59	2,840,140.74	5,636,318.33
10	Brush Cutting and Burning	7,503.27	65,130.46	72,633.73
11	Shoulders and Approaches	225,700.36	202,700.70	428,401.06
12	Slopes, Ditches and Small Drainage	469,315.11	351,030.40	820,345.51
14	R/W and Station Markers	3,485.23	806.89	4,292.12
15	R/W Fence	11,886.70	7,590.88	19,477.58
16	Slide and Washout Repair	67,856.75	46,902.46	114,759.21
17	Weed Control—Chemical	79,847.20	92,677.21	172,524.41
18	Weed Control—Mowing and Burning	236,910.76	223,146.28	460,057.04
19	Seeding	2,478.60	3,621.37	6,099.97
21	Minor Structures	26,457.37	17,256.49	43,713.86
22	Bridges over 20 feet	61,721.29	80,415.62	142,136.91
23	Underpasses	7,329.95	6,304.19	13,634.14
24	Riprap, Jetties, Walls, etc.	18,927.44	15,247.93	34,175.37
25	Concrete Curbings and Medians	3,126.94	6,012.08	9,139.02
31	Guard Rail and Guide Posts	67,207.71	72,842.38	140,050.09
32	Signs	245,572.61	246,423.25	491,995.86
33	Signals	2,753.41	6,744.32	9,497.73
34	Historic Markers	6,198.01	4,256.92	10,454.93
35	Traffic Lines	327,490.16	373,817.57	701,307.73
36	Roadside Tables and Camp Sites	35,792.49	36,557.01	72,349.50
37	Detours	8,043.77	27,542.47	35,586.24
38	Lights & Lighting	150.06	1,274.62	1,424.68
41	Snow Removal	680,643.94	1,003,903.54	1,684,547.48
42	Snow Fence	82,035.51	73,894.95	155,930.46
43	Sanding Icy Surfaces	595,844.83	709,134.96	1,304,979.79
44	Chemical Treatment of Ice	19,971.35	29,576.23	49,547.58
45	Beautification Projects	4,111.93	12,356.54	16,468.47
46	Littering of Highways	23,713.97	81,324.37	105,038.34
47	Other Traffic Services	3,162.88	472.60	3,635.48
51	Rental, Light, Heat, Power, Telephone	76,910.65	75,070.58	151,981.23
52	Heat for Road Oil Tanks	39,306.22	40,980.04	80,286.26
53	Fence Erection and Repair	1,405.48	2,110.75	3,516.23
56	Improvement Tax	201.65	582.24	783.89
58	Maintenance of Yards	8,907.19	23,231.74	32,138.93
60	Grading and Graveling	14,664.84	264.48	14,929.32
70	Oiling, Plant Mix, Road Mix, Etc.	558,737.46	523,422.03	1,082,159.49
80	Oiling — Penetration		32,795.72	32,795.72
90	Oiling — Sealing	257,851.86	527,452.31	785,304.17
	Various Other Items	1,670.91	10,275.38	11,946.29
	TOTALS	\$ 7,121,937.79	\$ 7,927,284.84	\$15,049,222.63

SUMMARY OF DIRECT MAINTENANCE COSTS BY DIVISION

FISCAL YEAR 1963

<u>Division</u>	<u>Miles Maintained</u>	<u>Total Cost</u>	<u>Cost Per Mile</u>
Missoula	713	\$1,113,610.20	\$1,561.86
Kalispell	526	729,718.22	1,387.30
Butte	662	973,863.47	1,471.09
Bozeman	509	527,571.40	1,036.49
Great Falls	551	814,802.22	1,478.77
Havre	465	510,489.86	1,097.83
Glendive	552	427,391.29	774.27
Wolf Point	568	444,870.81	783.22
Billings	491	564,936.67	1,150.58
Miles City	495	450,811.10	910.79
Lewistown	697	563,839.55	808.95
TOTALS	6,229	\$7,121,937.79	\$1,143.35

FISCAL YEAR 1964

<u>Miles Maintained</u>	<u>Total Cost</u>	<u>Cost Per Mile</u>
715	\$1,156,237.15	\$1,617.11
526	891,936.81	1,695.70
671	1,022,781.89	1,524.27
516	574,324.02	1,113.03
553	893,762.50	1,616.21
465	580,481.75	1,248.35
564	509,985.69	904.23
568	500,321.25	880.85
491	632,311.16	1,287.80
495	538,074.59	1,087.02
697	627,068.03	899.67
6,261	\$7,927,284.84	\$1,266.14



Rotary Snowplows on McDonald Pass



Rockslide on US 12 West of Avon



US 2 and Great Northern Railway along Middle Fork of Flathead River

Record floods in June, 1964 did unprecedented damage to Montana's Highway System. Twelve bridges were totally destroyed and many miles of road were totally obliterated. The total cost of temporary restoration and permanent reconstruction of flood-damaged roads and highways in Montana is expected to exceed twelve million dollars. Photographs on this page and the two following pages show the nature and severity of the damage.



Middle Fork Bridge at West Glacier



Deep Creek on Montana 287 South of Choteau



Bear Creek Bridge on US 2 East of Essex



Two Medicine Creek Bridge on FAS 358 South of Cut Bank



Teton River on US 91 North of Dutton



Birch Creek on US 89 North of Dupuyer

STATE PARKS DIVISION

This Division is required, by Section 62-309 of the 1947 Codes, to submit a biennial report.

This is being submitted to the Governor and the Legislative Assembly under separate cover.

ADVERTISING DEPARTMENT

This Department makes a regular biennial report to the Governor and the Legislative Assembly and it is being submitted under separate cover.

